Why Spend Real Money on Virtual Goods?

Placing Microtransactions in the Context of Modern Re-Enchantment

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Abstract

This paper aims to explore the potential connection between the cultural process of modern re-enchantment, as described by Michael Saler, and the phenomenon of microtransactions in virtual worlds, which for the purposes of this paper is understood as spending real world money on goods and services within a virtual world. Specifically it explores if users of virtual worlds are motivated by concepts associated with modern re-enchantment when they engage in microtransactions. To this end, data has been collected from users of five virtual worlds regarding their motivations, habits, and opinions regarding virtual worlds in general and microtransactions in specific.

This research has found that users of virtual worlds frequently report their engaging in microtransactions as being motivated by aspects of gameplay associated with their sense of inhabitation in the virtual world, a phenomenon which this papers shows is a part of the cultural process known as modern re-enchantment.

Sammendrag

Denne oppgaven utforsker hvorvidt det finnes en kobling mellom den kulturelle prosessen kalt ”modern re-enchantment”, som den beskrives av Michael Saler, og fenomenet mikrotransaksjoner i virtuelle verdener, som i sammenheng med denne oppgaven defineres som å bruke ekte penger på varer og tjenester i virtuelle verdener. Mer spesifikt er målet med denne oppgaven å utforske om brukere av virtuelle verdener motiveres av konsepter relatert til ”modern re-enchantment” når de benytter seg av mikrotransaksjoner. Til dette formål har data blitt samlet inn fra brukere av fem virtuelle verdener med fokus på deres motivasjoner, vaner, og meninger rundt virtuelle verdener generelt og mikrotransaksjoner spesielt.

Denne forskningen har vist at brukerne av virtuelle verdener ofte rapporterer at deres motivasjoner for å benytte seg av mikrotransaksjoner henger sammen med deler av spillopplevelsen som kan knyttes til deres innlevelse i virtuelle verdener, et fenomen som denne oppgaven viser er en del av den kulturelle prosessen referert til som “modern re-enchantment”.

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1. Introduction

More and more of our daily lives are transitioning to the internet, and nowhere is this more apparent than in the entertainment sector. Music, movies, sports, and television series are all available for consumption through either online streaming or digital download services. One of the major players in online entertainment is, of course, the video game industry. From simple Facebook games to vast virtual worlds, the possibility to spend an increasing amount of your spare (and for some, work) time on online gaming is definitely there. In later years, however, there has been a shift in the way online games generate revenue. Where the subscription model, in which you pay a recurring fee to play, was once the industry standard, it is increasingly losing its ground to a business model based around microtransactions.[1]

Microtransactions in video game terms can be understood as the selling of minor in-game goods and services for a minimal price, often just a handful of US dollars, though the price varies between game titles and the items bought. If you look at Facebook games for example, many major titles allow you to spend your real-world money to buy a special game-currency, which in turn can be used to improve your gameplay experience in various ways. In the online shooter Team Fortress 2 you can buy a variety of various headwear for your avatar to don while gunning down other players, and Xbox Live offers you the opportunity to dress up your Xbox Avatar in a host of video game and pop culture themed apparel, all for a small fee.

Some may think it odd for adults to play video games in the first place, and for them it must seem doubly strange that they not only spend their money on video games, but then go on to purchase items that only exist inside the game. Like the internet, it should be unnecessary to say that video games, both as a cultural phenomenon and an industry, are here to stay. The more they become a part of our culture, the more socially acceptable they will become, which I believe further lowers the threshold of spending more money on them. In fact, Michael Saler argues that the online worlds of today can be considered a continuation of the "secondary worlds" that have been a part of our culture for decades, such as Tolkien's Middle-earth. This inhabitation of fantasy worlds is

[1] Gyuhwan Oh and Taiyoung Ryu, "Game Design on Item-selling Based Payment Model in Korean Online Games" in *Proceedings of DiGRA 2007*: 650

part of a cultural process Saler refers to as "modern re-enchantment", in which, among other things, spending time in the realm of fantasy is becoming an increasingly accepted past-time.

Based on the above arguments, this paper aims to explore the following question:

> *Is it possible to make a connection between Saler's concept of "modern re-enchantment" and the motivations of users of virtual worlds to engage in microtransactions?*

In order to answer this question it will be necessary to break it down into the following research questions:

> *1. Can we consider inhabitation of literary "secondary worlds" to be the same or a similar phenomenon to the immersion in digital virtual worlds?*
>
> *2. Do the player's motivations to engage in microtransactions intersect with the above phenomenon of inhabitation/immersion?*

In the course of this paper I intend to make use of existing theory as well as data collected from both users of virtual worlds and the virtual worlds themselves in order to attempt to answer the above questions. Chapter 2 of this paper will provide an overview of existing theory that applies to this paper, including: Saler's theory of modern re-enchantment and the concept of inhabiting secondary worlds as inspired by J.R.R. Tolkien; a definition of key video game terminology as it is used for the purposes of this paper, as well as existing theory regarding video games in general and persistent online worlds in specific; a brief introduction to the concept of microtransactions as they appear in persistent online worlds. Further, the theoretical connection will be made between modern re-enchantment, as represented by the concept of inhabitation, and the user's experience of persistent online worlds, as represented by Gordon Calleja's theory of incorporation.

Chapter 3 presents the methodological aspects of this paper, including the sample of virtual worlds to be studied, as well as the design of a content analysis intended to give an overview of the categories of virtual goods available through microtransactions; a quantitative questionnaire that serves to provide some basic data on the users of virtual worlds and their relationship to microtransactions, and also to recruit informants to the final method of data collection; finally, a

qualitative research interview which aims to shed some light on how microtransactions affect both the user's experience and his involvement in the virtual world.

Chapter 4 is devoted to the analysis of the data collected from the above studies, and will provide the foundation for Chapter 5, in which the discussion will aim to show whether or not it is possible to connect the theory of modern re-enchantment with the virtual world user's motivations to engage in microtransactions.

2. Theory

2.1 Modern Re-Enchantment

Max Weber said that "The fate of our times is characterized by rationalization and intellectualization and, above all, by the 'disenchantment of the world.'"[2] This 'disenchantment' that Weber refers to has been one of the defining terms used by sociologists when describing the concept of 'modernity', which may well be the "fate of our times" that Weber spoke of. While the term 'modernity' may be difficult to pin down, it is neatly summarized by Michael Saler:

> ""Modernity" is one of the most ambiguous words in the historian's lexicon. … In broad outline, modernity has come to signify a mixture of political, social, intellectual, economic, technological, and psychological factors, several of which can be traced to earlier centuries and other cultures, which merged synergistically in the West between the sixteenth and nineteenth centuries. These factors include (but are not exhausted by) the emergence of the autonomous and rational subject; the differentiation of cultural spheres; the rise of liberal and democratic states; the turn to psychologism and self-reflexivity; and the dominance of secularism, nationalism, capitalism, industrialism, urbanism, consumerism, and scientism. […] There is one characteristic of modernity, however, that has been emphasized fairly consistently by intellectuals since the eighteenth century: that modernity is "disenchanted"."[3]

So what exactly does it mean to be disenchanted? Weber described it as there no longer being any magic or supernatural causal forces at play in the world, in other words everything could be understood or explained through rational and scientific means.[4] As a result of this intellectualization, the ultimate values of our society, those with their roots in the supernatural, become devalued by rationalization and are replaced by more earthly, materialistic pursuits.[5] This, according to Nicholas Gane, has a "tragic outcome, for it not only strips the world of its ultimate values, but subordinates creative action to the rational consideration of means and ends, in the process draining social life of its vitality and 'humanness'".[6]

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[2] Max Weber, "Science as a Vocation," in *From Max Weber: Essays in Sociology*, eds. C. Wright Mills and H.H. Gerth (New York: Routledge, 2007), 155
[3] Michael Saler, "Modernity and Enchantment: A Historiographic Review", *The American Historical Review*, Vol. 111, No. 3 (2006), 694
[4] Weber, "Science as a Vocation", 139
[5] Nicholas Gane, *Max Weber and Postmodern Theory: Rationalization versus Re-enchantment* (Basingstoke: Palgrave, 2002), 15
[6] Gane, *Max Weber and Postmodern Theory*, 25

However, Michael Saler disagrees with the idea that the modern world can rightly be called 'disenchanted'. Along with Joshua Landy he argues that the disenchantment brought on by modernity was accompanied from the very start by a form of re-enchantment.[7] As part of his argument, Saler presents the two most accepted models of defining enchantment. The first model he calls the binary model, in which 'enchantments' are understood as residual, remnants from the pre-modern times. These residual enchantments were considered inferior superstition, the fancies of children and savages and subordinate to rational western thought.[8] The dialectical model, on the other hand, portrays modernity and its belief in science as an enchantment in itself. As examples of this view, Saler uses the writings of Marx, in which the ideals of modernity are linked to enchantment through metaphors such as specters and fetishes, and the works of Nietzche, who portrays modern belief in science and reason as equally as irrational as the supernatural forces it replaces.[9]

Saler goes on to argue that none of the models give an adequate description of modernity and its relationship with enchantments. He presents a third model, in which modernity is "characterized by fruitful tensions between seemingly irreconcilable forces and ideas".[10] In other words, the disenchanting forces of modernity and their antithetical enchantments are clashing and creating a synthesis: a modern re-enchantment of the world, in which tenets of rationality and science are the basis of a form of enchantment that "delights without deluding".[11] Saler goes on to present three characteristics of modernity that enable these forms of modern re-enchantments: the Ironic Imagination, Animistic Reason, and Public Spheres of Imagination.

The ironic imagination can be understood as the ability to experience marvels and delights, without losing sight of the fact that they are not real.[12] It is the "it's real but it isn't" mentality that is prevalent in most fictional media consumption today. When discussing a particularly well-acted villain in a movie, for example, you may exclaim: "Can you believe he would do

[7] Joshua Landy and Michael Saler, "Introduction: The Varieties of Modern Enchantment", in *The Re-Enchantment of the World: Secular Magic in a Rational Age*, eds. Joshua Landy and Michael Saler (Stanford: Stanford University Press, 2009), 2
[8] Saler, "Modernity and Enchantment", 695-696
[9] Sales, "Modernity and Enchantment", 698
[10] Saler, "Modernity and Enchantment", 700
[11] Michael Saler, *As If: Modern Enchantment and the Literary Prehistory of Virtual Reality* (New York: Oxford University Press, 2012), 30
[12] Michael Saler, "Modernity, Disenchantment and the Ironic Imagination", *Philosophy and Literature* Vol. 28, Nr 1 (2004), 139

something like that?" even though you know full well that *he* did not actually *do* anything, as neither *him* nor *his victims* exist beyond the set of the movie.

Animistic reason is a way of thinking in scientific terms while still leaving room for the fantastic and imaginative. Sherlock Holmes is a good example of this (and his modern-day reincarnation, Dr. House for that matter), in that the thing that gives him his near-superpower of deduction is the ability to combine modern virtues such as logic and observation with a highly vivid imagination.[13] It is the animistic reason that allows us to combine science and fiction to create its own genre of cultural expression.

Finally, there are the public spheres of imagination.[14] In the early ages of fantastic fiction these were usually the letters pages of magazines devoted to various genres of fiction, where fans would eagerly discuss fictional characters, places and events. Over time, other venues appeared such as associations and conventions devoted to a specific fantasy character or universe.[15] These discussions would often take on a highly modern, positivist nature where the participants would analyze the writings, finding logical explanations for contradictions and plot holes, and filling in any gaps through interpretation of the existing material.[16] Once again, the modernist ideals are applied to fantasy worlds, but instead of picking them apart and exposing them as unrealistic and false, they use their scientific work to strengthen the fantasy. You don't have to look hard to find examples of these public spheres in the society of today. The internet is home to a myriad of forums and sites devoted to the collection, discussion, and collective enjoyment of a staggering amount of fantasy worlds and characters. Here in the physical realm, conventions are still a meeting point for fans of all kinds of fictional genres and products, with one of the arguably largest examples, the San Diego Comic-Con, attracting over 130,000 visitors over 4 days in July 2012.[17]

There are several phenomena that may be viewed as expressions of modern enchantment. Joshua Landy uses the popularity of stage magicians (although we can extend it to the more recent sub-

[13] Michael Saler, "'Clap If You Believe In Sherlock Holmes' : Mass Culture and the Re-Enchantment of Modernity, c. 1890-c. 1940", *The Historical Journal*, Vol. 46, No. 3 (2003), 604
[14] At this point, it is worth noting that Saler is operating with his own definition of 'public sphere', one that is not necessarily in line with Habermas' more famous definition.
[15] Saler, *As If*, 17
[16] Saler, *As If*, 18
[17] Sandy Cohen, "Comic-con wraps after 4 days of pop-art indulgence", AP.com, accessed May 30, 2013. http://bigstory.ap.org/article/comic-con-wraps-after-4-days-pop-art-indulgence

category of street magicians), as an example of the characteristic of modernity that is to willingly be deceived.[18] Robert Harrison looks at makeshift gardens created by homeless people in New York, where they use the type of waste found in urban environments as a way of symbolizing real flora and fauna,[19] although this may be considered an enchantment in the binary sense; as a residue in a modern setting rather than a modern form of enchantment. Meanwhile, Robin Walz presents the 19th century pop-cultural phenomenon of the mass-produced serial story known as the *rocambolesque*[20]: a genre of mass produced fantastical fiction that was notorious for, in order to ensure the sales of the next installment, ending each story on a spectacular cliffhanger which would resolve themselves in the next episode through a mixture of logic and imagination.[21] Hans Ulrich Gumbrecht considers the modern spectator sport as another modern re-enchantment, during which both players and spectators enter a state of "focused intensity" that, for the successful team at least, culminates in intense epiphanies; such states of intensity, Gumbrecht argues, are rarely seen elsewhere in disenchanted modernity.[22] An athlete who manages to give a particularly inspired effort on the pitch is said to be 'in the zone', which Umbrecht points out can be understood as a modern, secular way of expressing the same state the ancient Greeks knew as 'divine inspiration'.[23] It still holds a certain air of magic about it in modern sports, and so can be understood to be a re-enchantment. As a side note, based on this observation it is not hard to imagine why many of the chants performed by the fans at soccer games are re-written religious songs.

J.R.R. Tolkien also made some observations about the disenchanted reality that modernity brought. In an essay on fantasy stories he noted that Fairy-stories (not necessarily understood as fairytales, but rather stories that take place in the realm of imagination[24]) have, due to their

[18] Joshua Landy, "Modern Magic: Jean-Eugène Robert-Houdin and Stéphane Mallarmé" in *The Re-Enchantment of the World: Secular Magic in a Modern Age*, Eds. Joshua Landy and Michael Saler (Stanford: Stanford University Press, 2009), 110
[19] Robert Harrison, "Homeless Gardens" in *The Re-Enchantment of the World: Secular Magic in a Modern Age*, Eds. Joshua Landy and Michael Saler (Stanford: Stanford University Press, 2009), 75
[20] Robin Walz, "The Rocambolesque and the Modern Enchantment of Popular Fiction" in *The Re-Enchantment of the World: Secular Magic in a Modern Age*, Eds. Joshua Landy and Michael Saler (Stanford: Stanford University Press, 2009), 131-132
[21] Walz, "The Rocambolesque", 147
[22] Hans Ulrich Gumbrecht, "Lost in Focused Intensity: Spectator Sports and Strategies of Re-Enchantment" in *The Re-Enchantment of the World: Secular Magic in a Rational Age*, Eds. Joshua Landy and Michael Saler (Stanford: Stanford University Press, 2009), 150
[23] Gumbrecht, "Lost in Focused Intensity", 152-153
[24] John R.R. Tolkien, "On Fairy-Stories" in *The Tolkien Reader* (New York: Ballantine, 1966), 4

incompatibility with modernity, for the most part retreated from modern culture into the realm of children, "as shabby or old-fashioned furniture is relegated to the play-room".[25] However, he goes on to argue that fantasy and fantasy stories are, in a formulation that is highly compatible with Saler's modern re-enchantments:

> "a natural human activity. It certainly does not destroy or even insult reason; and it does not either blunt the appetite for, nor obscure the perception of, scientific verity. On the contrary. The keener and the clearer is the reason, the better fantasy will it make."[26]

This sentence is a prime example of both ironic imagination and animistic reason: Engaging in fantasy does not mean losing sight of reason, and if anything it encourages the pursuit of scientific truths. Furthermore, he states that when in the process of creating stories of so-called fantasy, the writer successfully invokes the power of Faery, or the human imagination, he in the process becomes what Tolkien calls a "sub-creator".[27] When the creator of a fictional story proves to be a successful sub-creator, the product of his work becomes a "Secondary World" which it is possible for the reader to mentally enter and relate to as a real place.[28] These 'Secondary Worlds' are thus a thoroughly modern form of enchantment, fictional places that are inhabited through the use of ironic imagination, and are enhanced and made more enjoyable by successful applications of animistic reason. This phenomenon of mentally entering secondary worlds, as it is described by Tolkien, plays a large part in the argument of this paper, and for the sake of brevity it will be referred to as "inhabitation" from here on.

2.2 Video Games

Before delving into the connections between video games and re-enchantments, it will be necessary to clarify some of the terminology being used. First of all is the term *video game* itself. Traditionally there has been a distinction between *computer game* and *video game*, where a computer game is one which is played on a personal computer while a video game is played using a piece of hardware connected to a television. I feel that there is no longer any need to make such a distinction. In fact, a quick perusal of the Entertainment Software Association's

[25] Tolkien, "On Fairy-Stories", 14
[26] Tolkien, "On Fairy-Stories", 24
[27] Tolkien, "On Fairy-Stories", 9
[28] Tolkien, "On Fairy-Stories", 15

website shows that the terms are used rather interchangeably,[29] and while the ESA is not necessarily the defining authority of video game terminology, it is still an indication of the diffusion of these terms. After all, it makes no difference if you play *Call of Duty* on a computer or a video game console; it is still the same game. One could argue that certain game *genres* are more prevalent in one gaming platform, but I would argue that playing games is, in essence, the same activity regardless of what platform they are played on. For this reason I will use the term *video game* to mean both games made exclusively for computers or game consoles, as well as titles that are available for both.

However, for the purposes of this paper it will be necessary to be more specific in terms of the kind of game to focus on. In order for a video game to be considered a re-enchantment, as defined in this paper, it will require two things: A *secondary world*, as defined by Tolkien, that a player can inhabit, as well as a way of inhabiting said world. The first step, then, is to examine where this might be found.

The space that is created by a video game is known as the *game world*, although this term is not entirely unproblematic. As Gordon Calleja notes, two different game titles may be so vastly different, among other things in the kind of "world" they create, that even though they can both be called "games", it is important for any argument to acknowledge these differences.[30] As an example he uses the game titles "Tetris" and "Grand Theft Auto 4". In "Tetris" the game world, if the term *world* could even be said to apply, consists merely of a rectangular box inside which pieces of various shapes fall down. In "Grand Theft Auto" on the other hand, the game world is a whole micro-city based more or less loosely on New York City which the player is free to explore within the limits set by the game rules. I would say that games such as Tetris do not necessarily qualify as *worlds*, but rather a more simple form of game the does not fit into this discussion. On the other hand, the game world created by "Grand Theft Auto" has one aspect that disqualifies it from this paper: it is not a *persistent* world.[31] Once you turn off the game, Liberty City, as you know it, disappears. Of course, there may still be other people in the world playing the game, and Liberty City is certainly still an inhabitable world for them, but your

[29] "The Entertainment Software Association", accessed February 1, 2013. http://www.theesa.com/
[30] Gordon Calleja, *In-Game: From Immersion to Incorporation* (Cambridge:MIT Press, 2011), 3
[31] This does not mean that Liberty City cannot be understood as a secondary world, it simply not the type of game world this paper focuses on.

unique instance of Liberty City is gone until you turn the game back on again, and this is true for everyone playing the game; they all have their own, individual copy of Liberty City that only they inhabit.[32]

The type of game world that is the object of this study is known as a *persistent online world*. Persistent, in this case, simply means it still exists after you turn off the game. An example of this kind of game world would be Azeroth, the world of *World of Warcraft*. Unlike Liberty City, each instance of Azeroth is shared between hundreds, sometimes even thousands of players. This means that even if you quit the game, there is still plenty of action going on in the game world you just left, and when you return you find that things have progressed while you were gone. Your friends may have gained levels, someone might have snatched up the item you wanted to buy in the Auction House (a sort of in-game eBay), and the people that were around you when you logged off are gone, either logged off themselves or off adventuring in other parts of the world. According to Calleja, this social nature of shared worlds helps make the game environment feel more like a "living, breathing world".[33] This can be said to aid in the process of "sub-creation", as Tolkien referred to the process of creating secondary worlds for the mind to inhabit. In fact, Calleja even invokes Tolkien's definition of secondary worlds when he says that persistent game worlds and their capacity to create shared experiences among their users enhance the capabilities of the game developers to become "sub-creators".[34]

If persistent online worlds can be understood to fit under the category of Tolkien's secondary worlds, we will still need a means to inhabit them, to create a projection of ourselves inside them in order to experience them as real places. This projection, at least in the game titles included in this study, comes in the form of the *avatar*. Once again, this term is not entirely unproblematic, and will require some definition. Castronova defines it as "the physical representation of the self in virtual reality"[35], and this is a good start but we have to get more into specifics. To begin with we have to look at the different ways the player is represented in video games. In games series such as *Civilization* and *Command and Conquer*, you control the movement of armies and the

[32] It is possible to engage in multiplayer games in GTA IV, in which several people compete in an instance of Liberty City, but this does not mean they are entering your personal copy. A new, temporary copy of the city is entered for the duration of the game.
[33] Calleja, *In-Game*, 94
[34] Calleja, *In-Game*, 139
[35] Edward Castronova, "Theory of the Avatar", CESifo (Working Paper No. 863, Ifo Institute, Center for Economic Studies, CESifo Group Munich, 2008), 4

production of your industry, yet I would not say that the tank factory or a single infantryman out of the dozens you have at your disposal can be called your avatar. Instead, the representation of the player is relegated to be a part of the interface: a mouse pointer, and although the traditional arrow we all know from the Windows interface may be replaced with something more appropriate for the context of the game, such as a mailed hand, a sword or a magic wand, it is nonetheless still a mouse pointer, and thus not an avatar. As Rune Klevjer points out: "For the cursor to be able to function as an avatar, it would need to belong to the simulated environment in some way."[36] In other words, in order for a manifestation of the player to be considered an avatar it is not enough to simply be a part of the game, as in the case of the cursor, but also to be a part of the game *world*. While it is often implied that the avatar has to have a human or human-like shape, this definition implies that this is not necessary. In racing games, such as *Gran Turismo*, it is the car that the player controls that acts out the player's commands within the game world, while in *Call of Duty* the only part of the avatar that is visible to the player is his weapon and the hands that are holding it. A car and a gun can just as well be considered an avatar, as long as they are a representation of the player and his actions within the game world, or in Klevjer's words: "As an embodied extension or prosthesis, the avatar is important because it enables us to act in the world of the game."[37] For the purpose of this study, the games chosen all feature a human or human-like avatar, which is more a result of video game conventions than research design.

If we accept persistent online worlds as a form of secondary worlds, then simply having an avatar will only enable you to show up. In order to actually inhabit them, in other words to mentally enter them and treat them as a real place, it is necessary to take one step further. This step, I would argue, is known as immersion. T.L. Taylor nicely sums up the role of the avatar as being central to both our presence as well as our immersion in the game world, as it is through the avatar that we experience the game world, and so become immersed in it.[38] To state that someone is immersed in a game is fairly commonplace, but once again we are dealing with a term that has been hard to define. Alison McMahan presents the definition of immersion as both being immersed in terms of the story or narrative in a game, as well as being immersed in the sense of

[36] Rune Klevjer, "What is the Avatar? Fiction and Embodiment in Avatar-Based Singleplayer Computer Games" (PhD dissertation, University of Bergen, 2006), 63
[37] Klevjer, "What is the Avatar?", 62
[38] T.L. Taylor, *Play Between Worlds: Exploring Online Game Culture (Cambridge: MIT Press, 2006)*, 110

actually playing the game, that is to work within a set of rules to achieve a goal. She also acknowledges, and rightly so, that these are two different activities.[39]A more thorough definition of the phenomenon of immersion has been made by Gordon Calleja, who presents a variety of ways in which it is possible to become involved in a game, and places them in six different dimensions: ludic, affective, narrative, shared, spatial, and kinesthetic involvement.[40] In each category he further divides the involvement into two phases; the macro phase: activities that the player engages in outside of the game itself, but are still related to his involvement in a game, such as reading about different strategies on the Internet;[41] and the micro phase: the aspects of involvement that are directly related to the playing of the game.[42] These six dimensions of involvement form the basis of what Calleja calls "incorporation":[43]

> "We can thus conceive of incorporation as *the absorption of a virtual environment into consciousness, yielding a sense of habitation, which is supported by the systemically upheld embodiment of the player in a single location, as represented by the avatar."*

He suggests that this experience of incorporation works in two ways: the virtual world becomes incorporated in the player's consciousness simultaneously as the player becomes incorporated in the virtual world through the avatar.[44] This concept is highly relevant to the ambitions of this paper, and it's similarities with the concept of inhabitation will be examined shortly.

A similar perspective to Calleja's incorporation in virtual worlds comes from Edward Castronova, who postulates that the fantasy world and the real world are metaphorically separated by a membrane, which acts as a sort of barrier which keeps real-world logic from entering and deconstructing the fantasy within. However, Castronova continues, the membrane is a porous one, and it allows people, as well as the mental baggage they bring with them, to cross it at will in both directions.[45] In the case of virtual worlds, a large quantity of people will simultaneously cross the membrane into the same virtual world, and the users will interact with each other according to the rules within the membrane. Castronova argues that this cohabitation

[39] Alison McMahan, "Immersion, Engagement, and Presence: A Method for Analyzing 3-D Video Games" in *The Video Game Theory Reader*, eds. Mark Wolf and Bernard Perron (New York: Routledge, 2003), 68
[40] Calleja, *In-game*, 38
[41] Calleja, *In-game*, 39
[42] Calleja, *In-game*, 40
[43] Calleja, *In-game*, 169
[44] Calleja, *In-game*, Ibid.
[45] Castronova, *Synthetic Worlds: The Business and Culture of Online Games* (Chicago: University of Chicago Press, 2006), 147

means that human society can be found on both sides of the membrane, and since society is effectively the defining authority on such concepts as value, what is considered valuable inside the membrane will become valuable outside it as well.[46] In other words, if a virtual item is considered valuable to a player, he will not only consider it valuable while he is playing the game, he will still think of it as valuable when he is not playing. He may spend time outside of the virtual world planning on how to acquire said item, or find other people who wish to work together to acquire said item. He may act in one world to get a result in the other. This, according to Castronova, has an effect on the membrane: "By this process, virtual things become real things; when most people agree that the thing has a real value to somebody, it genuinely does have that value. It is not virtual at all anymore, but real and genuine."[47] In other words, the membrane between the two worlds becomes blurred, and consequently the concept of virtual things becoming real need not only apply to items you can acquire, but achievements and society as well.

But why do people play games to begin with? To phrase it in a chicken-or-egg style, do we play games to experience re-enchantment, or do we experience re-enchantment because we play games? It is hard to make any claims as to *why* people play games, since motivations, like the people that have them, are all different. Nick Yee, however, has worked on categorizing the motivations of gamers, and has come up with three main factors, which he labeled Achievement, Social, and Immersion. Achievement involves such things as gaining levels or beating opponents, Social involves interacting with other players or being part of a team, Immersion includes exploring the game world or customizing your character.[48] These examples are not exhaustive, but should give an idea of what each category involves. Yee also points out that these categories are not exclusive, nor are they all necessarily actively motivating a player at all times. This means that it is possible for a player to cover one, some, or all of these categories during the course of his game playing experience.[49]

One of the motivations listed above, customization, should be looked at a little closer. Another feature shared by the games involved in this study is the ability to create and, to some extent,

[46] Castronova, *Synthetic Worlds*, 147-148
[47] Castronova, *Synthetic Worlds*, 148
[48] Nick Yee, "Motivations of Play in Online Games", *CyberPsychology and Behavior* 9 (2006): 773
[49] Yee, "Motivations of Play", 774

customize your own, personal avatar. This happens by selecting race (human or an endless variety of human-likes), gender and usually some basic appearance options, such as hairstyle and eye color. However, as observed by Anders Tychsen (et al), since all players of a given game are forced to make their avatars from common templates, the end result is that the avatars created are generally quite similar, apart from the minor visual details the player is allowed to tweak.[50] For this reason, I believe customization is an important part of immersion as well as playing a part in the user's motivations in terms of playing in persistent online worlds. According to Joanne Finkelstein, we create a public persona in order to take part in society,[51] and furthermore that the conventions of modern media, such as film or theater, have affirmed that identity is something that can be represented visually.[52] Because of this, identity has become a commodity, something that can be bought by acquiring the items that convey the message you want to send about yourself.[53] It is certainly possible to make the argument that the avatar is our "public persona" in the online society, and it is certainly not a stretch to claim that the appearance of this avatar is a reflection of the identity its owner wishes to convey. Based on this, it is easy to understand why customization of your avatar, to make his appearance express what you wish him to express, is an important aspect of gaming. It also makes apparent that if you wish to make your avatar unique, you need to move beyond the limited customization of his physical appearance and into another aspect of his appearance: what he is wearing. To keep within the scope of this study, it will be necessary to examine what possibilities the player is offered by microtransactions to manipulate the appearance of their avatar.

2.3 Microtransactions

It is important to distinguish microtransactions from digital distribution in general. It is possible to both purchase and download complete games through such online services as Steam, Xbox Live and PlayStation Network. Of course, digital distribution is not limited to the video game industry. You can find equivalents in the worlds of music (Spotify, iTunes), movies and

[50] Anders Tychsen et al., "Personalizing the Player Experience in MMORPGs", *Technologies for Interactive Digital Storytelling and Entertainment* 2006: 261
[51] Joanne Finkelstein, *The Art of Self Invention: Image and Identity in Popular Visual Culture* (London: I.B. Tauris, 2007), 2
[52] Finkelstein, *The Art of Self Invention*, 129
[53] Finkelstein, *The Art of Self Invention*, 116

television (Netflix, Hulu), and books (Kindle, Nook). What all these services have in common is that they offer digital versions of media that is both traditionally and commonly available in a physical format. The difference between digital distribution and microtransaction (as it is defined for the purposes of this paper, at least) is that while the former can be considered one of several ways to distribute complete media products, the latter is more a supplement to an existing product. However, if you stick to the meaning of the word "microtransaction" it is also possible to include other, small purchases such as a single track from a CD to its possible definitions. In order to create a clear distinction between the interpretations of the term in the media industries in general and the video game industry in specific, I will refer to this business model as it is often called in the world of Massively Multiplayer Online Games (MMOGs): the "Free To Play" model.

The "Free To Play" model (or F2P for short) is so named because it involves giving users completely free access to their game, with no purchases or subscriptions required. Once inside the game, the user will be introduced to an in-game meta-store (it exists inside the game, but not inside the game-world) in which a whole host of items and services can be purchased for real world money, and it is from this store revenue is made. This is not the only source of revenue, however, as it is still entirely possible to pay a monthly subscription fee, in exchange for perks and benefits such as game content not available to non-subscribers. This model has proven to be very effective. Norwegian developer Funcom made the move from subscriptions-only to F2P with their MMOG title *Age of Conan*, a move which resulted in a reported profit increase of 20-30%.[54]

The origin of the F2P model may be hard to pinpoint, but we can fairly accurately determine its roots. Vili Lehdonvirta dates the first emergence of real-world money being spent on in-game items to 1999, when listings appeared on eBay where users of MMOGs would auction away items they had obtained in-game.[55] In many ways we can call this a precursor to microtransactions, and undoubtedly a practice that showed the industry that (some) gamers are willing to pay real money for in-game items. Of course, it is not only in-game items that were commonly traded on eBay, but in-game currency as well. In fact, Edward Castronova calculated

[54] Anders W. Hagen, "Setter 200 mill. i spill," Dagens Næringsliv, May 26. 2011, 100
[55] Vili Lehdonvirta, "Virtual item sales as a revenue model: identifying attributes that drive purchase decisions," *Electronic Commerce Research* 9 (2009): 98

that an hour of dedicated gaming in the MMO *EverQuest* would net you 300 platinum pieces (the currency of *EverQuest*), which in turn was worth 3.50 USD in online markets.[56] From this he could calculate that the annual production per person in *EverQuest* amounted to an average of 2000 USD per person, which gave this particular fantasy world a GNP equal to that of Bulgaria.[57] Granted, this study was conducted in 2001, and the GNP of *EverQuest* has undoubtedly decayed since then, along with its number of subscribers, but the principle remains: fantasy money and fantasy products have a tangible, real-world value.

The focus of this paper is not on the trading of real-world money for in-game currency, however, as this rarely takes place in the developer-run meta-stores. To make absolutely clear the category of items this paper is focusing on I will use the term "virtual goods". A virtual good is to be understood as an item that is available in-game and only in-game, is exclusive to a single game title and is usable primarily by the player who bought it. It is not a very narrow definition, but then trying to rein in all different types of virtual goods available for purchase is a tall order itself. It could be anything from dragon eggs to enchanted machine guns, a scroll that makes your avatar permanently stronger or a potion that allows your avatar to run faster for an hour, or even a piece of broken glass that has no apparent function. What can be considered a virtual good is quite literally up to the imaginations of the game developers.

It is, however, possible to make some distinctions among virtual goods, and Lehdonvirta divides virtual items into three aspects: functional, emotional, and social.[58] A functional item can be understood as one that enhances your performance in some way. Drawing on sociological research on the emotional aspects of consumption, he defines emotional items as ones which give the consumer hedonistic enjoyment through their aesthetic qualities.[59] Finally, social items are defined as those which are given value through the society in which they exist, and he uses such examples as items with symbolic value within a culture, or collections which have symbolic value to the collector.[60]

[56] Castronova, *Synthetic Worlds*, 19
[57] Ibid.
[58] Lehdonvirta, "Virtual Item Sales", 102
[59] Lehdonvirta, "Virtual Item Sales", 102
[60] Lehdonvirta, "Virtual Item Sales", 102-103

I believe this distinction of items is more useful in studies involving the complete market (the developer operated meta-store, as well as the trade economy between individual players) of virtual goods within a game world. The items that are the objects of this study are exclusively items that are available through the game's meta-store, and so it is necessary to make distinctions that acknowledge this fact, and I believe a simpler categorization will be adequate. First, I will break virtual store goods into two main categories: "items" and "buffs". "Items" have some form of physical representation in the game world, be it a weapon, a chair or even a pumpkin, and "buffs" are to be understood as tokens that, when activated, bestows upon the user some form of boost to his performance in the game, be it through combat prowess, crafting skill or any other area where the effects are hidden in the game code, without a physical representation. There are of course "items" that can be used to improve performance, and these will be referred to as "functional items" and are distinct from what I will refer to as "cosmetic items", items that bring no increase in performance whatsoever, as their value is entirely aesthetic and so are similar to Lehdonvirta's emotional items. Furthermore, by dividing what Lehdonvirta calls functional items into functional items with a physical representation in the game world, and buffs, I am able to focus more on the items that are visible both to the player and his co-inhabitants. This allows me to draw a connection between the items and the theory of re-enchantment: if certain items enhance immersion, and immersion enables and enhances the inhabitation of a secondary world, which in turn is the mode of re-enchantment that this study focuses on, then we can conclude that the items play a role in making the game experience a form of re-enchantment.

2.4 Incorporation as inhabitation

One of the arguments central to this paper is that the concept of "inhabitation" of secondary worlds, as it is described by Tolkien, can be considered the same state of mind as Calleja refers to as "incorporation". In fact, the latter states that:

> "Digital game worlds continue [the] tradition of creating secondary worlds and strengthen the internal logic of these worlds through the use of computing power that not only represents the world but animates its agents and keeps the internal logic in check. MMOGs further extend the powers of secondary-world creation through the persistent nature of their worlds and the shared, synchronous experience this allows."[61]

To explore the connection between these concepts, it will be necessary to more closely examine Calleja's dimensions of involvement in both the micro and macro phases. The purpose of this is to both give a summary of all six dimensions, as well as to argue how they might be connected with inhabitation.

Kinesthetic

In the macro phase of kinesthetic involvement Calleja presents the concept of agency.[62] This can be understood as the player's ability to influence the game world, and this includes the possibility that the influence of the player may have consequences beyond his initial intentions. Calleja uses the example of a player who accidentally kills all his team-mates with a grenade as an exertion of agency with unintended or unwanted consequences.[63] In games that feature some form of gradual skill development for the avatar, having low combat skills negatively affect the player's agency in the game world. In terms of re-enchantment, I believe agency is one of the concepts that are unique to the video game world, but that can be considered a step forward in terms of inhabitation. We may certainly feel transported to Middle-Earth when we read Tolkien's works, but we cannot actually enter it and fight the evil creatures inside, we simply watch the narrative unfold. It can easily be argued then that agency is the next step in world inhabitation, in that we are not only transported to the secondary world, but we may also act inside it, and the more

[61] Calleja, *In-Game*, 139
[62] Calleja, *In-Game*, 55
[63] Calleja, *In-Game*, 56

agency we are given within a game world, the more involvement we feel. In other words, the stronger the sense of agency the player experiences, the stronger is his experience of actually inhabiting the world.

On the micro level, kinesthetic involvement may be understood as how we navigate the game world.[64] On this level, we also touch on the perspective and embodiment of the player within the game world. In other words, navigating the game world through the perspective of a single avatar gives us a different sense of kinesthetic involvement than being simply a disembodied hand. As has been argued earlier, the avatar is one of the prerequisites to truly "inhabit" a game world as a secondary world. We can therefore conclude that kinesthetic involvement in both the micro and macro phases is necessary in order to truly inhabit a virtual world.

Spatial

In the macro phase, spatial involvement is gained through the exploration of the game world.[65] It can be experienced in such ways as planning a journey from point A to point B, attempting to reach places that may appear interesting from afar, or simply wandering around the virtual world taking it in.

The micro phase of this dimension deals with the actual navigation of the game world.[66] It can be finding a way around a mountain or across a river, but it is also the process of becoming familiar with the world. A player who can intuitively navigate through a major city in the game world can be said to achieved a high degree of kinesthetic involvement in the game world. Spatial involvement is in other words the very process of becoming part of the game world, not only by setting out to explore it, but to learn your way around it and eventually know the most efficient ways to get to a certain point. By internalizing the geography of the game world in this way it arguably becomes just as real to you as the geography of the real world.

[64] Calleja, *In-Game*, 59
[65] Calleja, *In-Game*, 73
[66] Calleja, *In-Game*, 77

Shared

Shared involvement is, in the macro phase, the concept of socializing in virtual worlds.[67] It may be with computer controlled actors or with other people, but it is still the concept of treating the virtual world like a social arena. In persistent online worlds we can assume this form of involvement is very much prevalent, as their persistent nature and large human population allow real societies to develop, making it easier for a player to become involved.

On the micro level this becomes the actual process of interacting with others in a virtual environment, either through cooperation, competition, or simply cohabitation.[68] Once again it can be argued that this form of involvement is made stronger by the presence of other humans, as opposed to only computer controlled actors. As touched upon earlier, the feeling of inhabiting a virtual world can be made stronger by sharing it with real people, and these various forms of actual interaction with them will by definition only enhance the experience of inhabitation.

Narrative

The macro phase of narrative involvement is split in two parts: narrative and experience.[69] Narrative can be understood as the story that is embedded in the game, while experience is understood as what the player himself adds to the game. As an example, the narrative in a game may be a dragon threatening a land and only the player has the power to stop him, and this will be the same for everyone who plays the game. The experience the individual player has, however, can be anything from having managed to complete the game without dying, or managing to save every single town in the game from being burned by the dragon. In other words, the narrative is the goals given by the game, and so is predestined, while experience may be understood as the goals the player sets for himself, and are more dynamic and dependent upon the player.

Calleja divides the micro phase of narrative involvement into the same two categories, but in this phase he refers to them as scripted events and alterbiography.[70] In the micro phase the involvement deals with individual events that happen during gameplay. Scripted events are predestined as they are coded in by the developer of the game, usually as part of the narrative,

[67] Calleja, *In-Game*, 93
[68] Calleja, *In-Game*, 101
[69] Calleja, *In-Game*, 113
[70] Calleja, *In-Game*, 120

and so will happen every time. The central character that will more or less unexpectedly betray you at the end is an example of a scripted event, because it is predestined and repeated every time. Alterbiography, on the other hand, are events that happen from coincidence or as a result of the player trying to manipulate the game in a certain direction. For example if the dragon attacked while the player was running from the city guard, causing the guards and the dragon to fight each other and allowing the player to escape them both. Both forms and both phases of narrative involvement can easily be understood as re-enchantment. It certainly invokes the ironic imagination, as these events, scripted or unscripted, happen to the player who reacts to them as if they are real. I would also argue that both narrative and experience are effective ways of involving the player in the secondary world, enhancing his feeling of inhabitation.

Affective

Affective involvement deals with the emotional affect games have on the player. In the macro phase this translates to escapism.[71] Calleja draws a distinction between "escapism" on one hand and "escape" on the other, noting that escape is understood as a permanent relocation, while escapism is considered a temporary "shift from one environment or emotional state to another one that is perceived as being more favorable".[72] By this definition, escapism may be as simple as seeking excitement when you are bored or relaxation when you are stressed, and in the context of video games these alterations of emotion are obtained through playing. Furthermore, in this definition of escapism it is also implied that the player carries his altered emotional state with him when he returns to the real world.

On the micro level, the focus is on the emotional affect the player experiences while playing.[73] One way games can affect the player are through the graphics, not only in terms of realism but also the aesthetics of the game can have a major impact. Emotional affect can also come from gameplay, such as the serenity of walking through a forest, or the intensity of a gun fight in close quarters.

I believe affective involvement carries a strong link to Tolkien's idea of inhabitation. In fact he addressed the criticism of escapism, stating that "Why should a man be scorned if, finding

[71] Calleja, *In-Game*, 135
[72] Calleja, *In-Game*, 136
[73] Calleja, *In-Game*, 139

himself in prison, he tries to get out and go home? Or if, when he cannot do so, he thinks and talks about other topics than jailers and prison-walls."[74] I believe this quote fits perfectly with Calleja's description of affective involvement, namely that the escapism afforded by video games allows players to easily have experiences that are welcome breaks from the mundane.

Ludic

Ludic involvement refers to the actual act of playing a game, which is to work within a frame of rules to obtain certain goals. In the macro phase, this can be understood as the player's motivation to actually play the game, in order to overcome challenges and reap the rewards associated with "winning".[75] In this phase, goals are more general ambitions, such as gaining levels to be able to explore more of the game world, while the associated reward could be equipment that is unavailable to lower level characters, although simply accessing new content may be considered a reward in itself.

On the micro level, ludic involvement involves the cognitive process associated with actually playing the game, and reacting to the consequences of your actions.[76] It still relates to the goal and reward structure of the macro phase, but focuses not only on the actions the player performs in the moment in order to both achieve his overarching goals, but also to reach more immediately pressing goals like defeating a monster, or simply to not die. In one way it could be said that ludic involvement is a step away from inhabitation, as it focuses entirely on the "game" part of video games and less on their potential as secondary worlds. However, the counter-argument would be that it is the ludic aspect of the game that provides challenges and obstacles and consequently rewards you for successfully overcoming them. In essence, the ludic aspect of a virtual world makes it alive because unlike the other dimensions of involvement which focus on how the player relates to the world, the ludic properties of a virtual world determines how the world reacts to the player. In so doing, the virtual world is made more real by becoming a two-way interaction.

[74] Tolkien, "On Fairy-stories", 60
[75] Calleja, *In-Game*, 147
[76] Calleja, *In-Game*, 155

2.5 Theory in context

The purpose of this paper is to examine the connection between Saler's concept of modern re-enchantment and the motivations of users of online virtual worlds to engage in microtransactions. To that end I have presented Saler's three modes of modern re-enchantment: the ironic imagination, animistic reason, and public spheres of imagination. These three modes can be applied in entering a state which has been described by Tolkien as mentally entering secondary worlds. My argument is that this inhabitation of secondary worlds can be compared to Gordon Calleja's concept of incorporation. To this end, we have explored the connections between Calleja's dimensions of involvement, which are the aspects of gameplay that enable incorporation, and the concept of inhabitation. The overarching argument is that if users of virtual worlds are engaging in microtransactions in order to enhance their feeling of incorporation, and if this feeling of incorporation coincides with the concept of inhabitation, then it can be concluded that the users of virtual worlds are engaging in microtransactions in order to enhance their experience of a modern form of re-enchantment.

The next step will be to collect relevant data to examine the potential connection between virtual goods and Calleja's dimensions of involvement, and if the users of virtual worlds are willing to engage in microtransactions in order to further enhance their feeling of involvement, and so consequently of inhabiting the virtual world.

3. Methodology

In order to collect the required data for this study, I have chosen three distinctive methods for three distinct purposes.

Before being able to make any statements of the link between virtual goods, as sold in meta-stores, and the theory of re-enchantment, it will be necessary to gain an overview of which virtual goods are in fact available for purchase. In order to achieve this, I will conduct a content analysis of a sample of meta-stores. This content analysis will also aim to investigate if there are any categories of virtual goods that are more prevalent in one or more virtual worlds.

The next step is to collect data from the users of virtual worlds regarding how they relate to the aspects of gameplay that may be associated with the concept of inhabitation. This will be done in two steps. The first is to distribute a questionnaire to several internet forums, with the dual purpose of gaining a rough overview of the demographics and attitudes of the users of virtual worlds, as well as recruiting informants for the second step of data collection: a qualitative research interview. This interview will be conducted in-game, and will aim to collect more in-depth information on the connection between purchasing virtual goods and the aspects of gameplay that may be associated with inhabitation.

Before starting the data collection, however, it will be necessary to choose a sample of virtual worlds, as well as internet forums, for the purpose of content analysis as well as avenues through which to distribute the questionnaire.

3.1 Sampling of virtual worlds

Estimating the population of virtual worlds is a task that, if not impossible, is a work of such magnitude that requires labor far beyond the scope of this paper. Both in terms of contacting respondents and in order to conduct a content analysis of in-game meta-stores, it will be necessary to limit myself to a sample of virtual worlds. When choosing which games to include in the sample, I had two main criteria: The first, that the primary language of the game be English; the second, that the game was employing the F2P model, with the implementation of a meta-store, at the time of the survey. In addition, I decided that the game would have to have a Western developer, in the belief that the majority of respondents would also be Western. This is,

after all, a study of modernity as a Western phenomenon and a comparative study involving different cultures is outside the scope of this study. The following titles were ultimately selected:

- Age of Conan (Funcom, 2008) – F2P in 2011
- DC Universe Online (Sony Online Entertainment/WB Games, 2011) – F2P in 2011
- Dungeons and Dragons Online (Turbine, 2006) – F2P in 2009
- EverQuest II (Sony Online Entertainment, 2004) – F2P in 2011
- The Lord of the Rings Online (Turbine, 2007) – F2P in 2010

In addition to the official message boards for the above game titles, I decided to post the survey on two MMO-related websites with attached forums: MMORPG.com and IGN.com. The purpose of this was primarily to expand the diversity of respondents by recruiting from a pool beyond the dedicated fan base of the sampled virtual worlds.

Ideally the target sample should be a certain percentage of the total population, but as the total population of virtual world users is a statistic that is nearly impossible to access, I believe it is adequate to draw the line at five major titles which utilize the F2P model.

3.2 Content Analysis of Meta-Stores

The first step of exploring the connections between microtransactions and Saler's theory of modern re-enchantment is to get an overview of what type of items one can find inside the meta-stores of the sampled games. The motivation behind conducting this analysis is first and foremost to have a solid, empirical overview of the categories of virtual goods one might find in a virtual world. Second, this empirical data can then be used in the analysis of data from the rest of the study to add to the framework of interpretation. For this reason, a content analysis is the best choice.

Content analysis, as defined by Kimberly Neuendorf, is a method that adheres closely to the scientific method.[77] As such, it embodies certain characteristics, such as objectivity, a priori design, various measures of reliability, and a capability for hypothesis testing. However, I will be making some slight deviations from these characteristics, as they are presented by Neuendorf,

[77] Kimberly A. Neuendorf, *The Content Analysis Guidebook* (Thousand Oaks: Sage Publications, 2002), 10-11

and so my own content analysis design will be built on a modified version of Neuendorf's criteria.

Research Design

In designing the content analysis, I will use the steps put forward by Anders Hansen (et al):[78]

1. Definition of the research problem
2. Selection of media and sample
3. Defining analytical categories
4. Constructing a coding schedule
5. Piloting the coding schedule and checking reliability
6. Data-preparation and analysis

The first step is to define the research problem, to determine what kind of data we want from the analysis. Obviously it is not enough to simply copy and paste research questions for the entire paper, as these encompass far more than can be hoped to be answered through the content analysis, and so the research questions for the content analysis will have to limit itself to the data we can realistically collect.

The focus of the content analysis will be on the kinds of virtual goods that can be purchased through in-game meta-stores. The first aim of the content analysis is to test the validity of the categories of virtual goods presented in the theoretical chapter of this paper. The second aim is to uncover which, if any, categories have been left out. In order to answer any research question relating to the various types of virtual goods available, it will be necessary to define exactly what types there are.

[78] Anders Hansen et al., *Mass Communication Research Methods* (Basingstoke: Macmillan Press, 1998), 98

The main obstacle this presents is the addition of interpretation into a method that is designed for counting. As Hansen (et al) point out:

> "Perhaps the main problem with evaluative categories is that they generally require a considerable degree of interpretation by the coder. [...] Unless very clear interpretation guidelines are laid down, content analysts often find it difficult to achieve a high degree of coder-agreement in the coding of evaluative categories."[79]

In other words, by adding a qualitative component to my content analysis design, I am forcing the coder to make interpretations that may vary wildly from interpretations made by other coders. Indeed, if this study had several coders to collect data it would be inconvenient to merge these two methods, but as this study only has one coder, the inter-coder reliability is a non-issue. For this reason, there is no problem with adding an interpretive aspect to the content analysis.

The second step is the selection of media and sample. Fortunately, a sample of relevant virtual worlds has already been made, and the content analysis will be conducted within the meta-stores of these titles. It is possible to question whether or not meta-stores can be considered media texts, for the purpose of conducting an analysis. While it can be argued that the virtual good can be considered a mediated message on the basis of the effect it has on the user experience of virtual worlds, the bottom line is that a content analysis is applicable in any context, as long as there are quantifiable categories to be found.[80] Despite the slight foray into qualitative categories as has been discussed previously, or rather based on this previous discussion, I believe that content analysis is the correct method for the analysis of meta-store content.

When it comes to defining the total population of meta-stores, it is arguably impossible to generate an exact figure considering their appearance in everything from massive video game blockbusters to Facebook games to other smaller, more obscure titles. Because of this, the calculation of such things as error margins and confidence intervals is made difficult. However, I believe this is not relevant in terms of the purpose of the study being conducted. As stated, the aim of this content analysis is to get an exhaustive, empirical overview of the categories of virtual goods available in the meta-stores of the sample of games selected for this study. For this reason, the aim is not to collect data that can in turn be applied to every single meta-store. One reason is

[79] Hansen et al., *Mass Communication Research Methods*, 115
[80] Neuendorf, *Content Analysis Guidebook*

the difficulty to assess the exact population of meta-stores, another is the fact that the contents of these stores vary from such possible variables as the genre of game they are featured in, the target demographic it is aimed at, the philosophy of the developer regarding what aspects of gameplay can be commoditized, and the list goes on. The generalization we can obtain from any data will be limited, but it will still be possible. After all, if one game company has thought of a way to commoditize an aspect of gameplay, it is certain that another has had the same thought, or has simply copied the idea from others. As such, we can make the generalization that the category of virtual goods we can find in one game's meta-store *might* be found in other titles as well.

The analytical categories used in the analysis will initially come from those defined in the theory chapter: "Item" and "Buff". Both of these have a set of associated variables. For instance, an item is either "Functional" or "Cosmetic", while a buff can be "Permanent" or "Temporary". There are also a sub-set of variables, such as "Item – Cosmetic" which have sub-variables like "Clothing/Armor", "Accessory", or "Physical Appearance". However, as part of the research design, the categories and variables will be expanded whenever a virtual good is discovered that does not fit into any existing category. Ideally, this means that by the end of the content analysis, the coding scheme will reflect an exhaustive list of types of virtual goods available in the sampled meta-stores, and the data collected will help determine which, if any, goods are emphasized within individual virtual worlds.

Pilot Test

At the start of the pilot test, the coding schedule contains the following categories and variables:

Item	**Buff**
Functional - Armor	Permanent - Avatar
Functional - Weapon	Permanent - Item
Functional - Accessory	
	Temporary - Avatar
Cosmetic - Armor	Temporary - Item
Cosmetic - Weapon	
Cosmetic - Accessory	

The pilot test was conducted on the first virtual world in the list of samples, namely Funcom's *Age of Conan*. The coding schedule was tested both in terms of how easily new variables and categories could be added, as need be, as well as the accuracy of the virtual goods counted. At the end of the pilot test, the coding schedule was updated with the new categories. It became immediately apparent that the variety of virtual goods is a great deal more extensive than at first assumed. However, this shows that not only is the coding schedule reliable, as new categories and variables were easily discovered and added, but that there is most certainly a need to conduct a content analysis of the meta-stores in order to have an empirical overview of the categories of virtual goods available.

Finally, Hansen (et al) list four common problems associated with coding schedules that the pilot test is intended to weed out.[81] The first is that categories and sub-categories get confused, causing errors of levels of classification. As new categories will be continuously added during the coding process, this is something that requires constant vigilance. As of the pilot test, I believe that all categories are of the appropriate level of classification. The second potential problem is that a single category may be so overrepresented that no valuable analysis can be drawn from the data. Even though certain categories were heavily represented in the pilot test, namely Functional – Armor and Functional – Weapons, there were enough other categories being recorded that allows us to conclude that this heavy representation is a result of the actual store contents and not the categories selected. The third problem presented by Hansen (et al) is that the categories are spread so thin that most of them will not be found during the data collection. I believe this problem is avoided due to the inherent flexibility of the coding schedule, which started out with only a few categories and only adds more when they are actually encountered during research. Finally, the fourth issue is that the correct units of analysis are not being measured or confused with each other. This is certainly something that once again requires constant vigilance, and some errors were found in the coding schedule after the pilot test. For instance, under the category Items, the sub-category "Other – Skill Reset" was added. This was added under "Items" because in the meta-store it was sold as an item that, when used, would allow the user to reconfigure the skills of his avatar. The problem with this is that the unit of analysis is not necessarily the item itself, but how the item can be used. Per my own definition, an "Item" is something with a physical representation in the game world. The skill reset item, although sold as an "item", does

[81] Hansen et al., *Mass Communication Research Methods*, 118-120

not fit this category as it never makes an appearance in the game world. This sub-category therefore needs to be moved to a more appropriate category.

In conclusion, the pilot test has revealed some aspects of the coding schedule that may cause problems, but I believe that they can be avoided by the diligence of the coder. Overall, the coding schedule appears to be functional and reliable, and is ready to be applied to the remainder of the sampled virtual worlds.

3.3 Quantiative Recruitment Questionnaire

The next part of the data collection was a quantitative survey in the form of a questionnaire posted on various Internet message boards. The purpose of this questionnaire was two-fold: The first, and possibly the main purpose, was to establish contact with users of online virtual worlds and attempt to recruit them to take part in a more in-depth qualitative interview at a later date. The second purpose was to obtain a rough outline of the demographics of gamers who do and do not purchase virtual goods with real-world money.

Due to the anonymous nature of Internet communication in general and Internet message boards in specific, it is difficult to obtain respondents to interview directly, and so it was necessary to create a self-completion questionnaire the respondents could fill out at their own computers at their own leisure.

This kind of questionnaire is, unfortunately, not entirely without its difficulties. Anders Hansen (et al) points out that one of the problems with self-completion is that if it is too long or contains too many questions, respondents will be discouraged from filling it out.[82] This can be traced to the fact that there are no researchers present when the respondent receives the questionnaire, nor when they fill it out to egg them on to finish it. If it seems like too big a task one can hardly fault them for putting it aside for later, never to pick it back up. This pitfall was avoided by limiting the questionnaire to a total of ten, mostly multiple-choice questions. The main purpose of this survey was to recruit potential interviewees, in other words it would not be necessary to attempt to obtain a large collection of data at this point.

[82] Anders Hansen et al., *Mass Communication Research Methods*, 236

Another reason to keep it short is the general quality of any potential data. Arthur Asa Berger talks about some of the problems associated with these types of surveys, and among them he lists misinterpretation of the questions (due to the lack of an interviewer to help guide them), low response rates, the frequency of sampling errors, as well as the fact that you don't know who filled out the questionnaire.[83] The latter holds especially true in the case of surveys posted on Internet message boards, in which you have absolutely no control over respondents and consequently have no way of being completely certain that each recorded response is unique and truthful.

Research design

Since a content analysis is largely a quantitative method, I followed largely the same steps in designing the questionnaire. To reiterate the steps:

1. Definition of the research problem
2. Selection of media and sample
3. Defining analytical categories
4. Constructing a coding schedule
5. Piloting the coding schedule and checking reliability
6. Data-preparation and analysis

The question that the questionnaire aimed to answer is as simple as "What kind of gamer buys virtual goods?" By that, I mean not only in terms of demographics, although I certainly intend to examine whether any groups are more likely to than others, but also in terms of Yee's categories of motivation.

It is exceedingly difficult to determine the populations of both online virtual worlds and Internet message boards, simply because that kind of information is usually not made public. In a study conducted by Dmitri Williams (et al) they also came across this problem, noting that "systematic and generalizable research has remained elusive, largely due to the difficulties of securing access

[83] Arthus Asa Berger, *Media and Communication Research Methods: An Introduction to Qualitative and Quantitative Approaches* (Thousand Oaks: Sage Publications, 2000), 190

to players within the walled gardens of for-profit companies."[84] In addition to this, if you are to add up the number of users of any number of MMOG titles, you have no way of knowing how many are *unique* users. In other words: a person with a subscription to both World of Warcraft as well as EverQuest II would be counted as two users in the total population, simply because there are no reliable ways of cross-referencing populations between game titles. Finally, even if you were to have in your possession a complete count of unique users, there is to my knowledge no studies conducted on whether or not the portion of a user-base that frequents the official forums are representative of the user-base in general. Once again, this data, if it is even collected, resides within the "walled gardens of for-profit companies."

However, in some cases the primary concern is not necessarily that the sample is representative, as in this study where the objective is more to put a hypothesis to the test than to produce any firm, unquestionable data. Since the scope of this study falls comfortably into that category, it is adequate to work with what is known as a "purposive sample".[85] In other words, the sample that is drawn from posting a self-completion questionnaire to a handful of Internet message boards may not be adequate to make any generalizable claims, but it should be adequate to test whether or not the hypothesis is waterproof enough to warrant further studies. With that in mind, the target number of respondents was taken from a suggestion made by Hansen (et al) for research students: 300 respondents.[86] Unfortunately the final number of respondents fell somewhat short of this target, ending at 242 completed responses.

In the questionnaire, the questions were broken down into several groups. The first group dealt with basic demographics, namely the age and gender of the respondent. The next group focused more on the video game use and preferences of the respondent, such as years of video game experience and preferred genres. One of the questions in this group was:

7. Do you currently play any MMORPGs or other games set in a persistent online world?

If the respondent answered yes, or that they had in the past, to this question they were presented with an additional set of sub-questions with the header "How important are the following aspects

[84] Dmitri Williams, Nick Yee, and Scott Caplan, "Who plays, how much, and why? Debunking the stereotypical gamer profile," *Journal of Computer-Mediated Communication* 13 (2008), 994
[85] Hansen et al., *Mass Communication Research Methods*, 241-242
[86] Hansen et al., *Mass Communication Research Methods*, 243

to your online game experience?" followed by a scale from 1 to 5, where 1 was least important and 5 the most important. These sub-questions were inspired by Yee's categories of gameplay motivation (Achievement, Social, and Immersion) and were intended to give an idea of the motivations of the respondent to play games in the first place, to see if there was any connection between motivation and engaging in microtransactions.

The last group of questions asked if they had ever bought either in-game items or a boost to their performance using real-world money. Finally, at the end of the survey the respondent was presented with the opportunity to volunteer for an in-depth interview by leaving their e-mail address in order to set up an appointment.

Pilot test

The pilot test was conducted upon receiving 30 responses after the questionnaire went live. This decision was partly motivated by the fact that the questionnaire software used would make it very easy to update the questionnaire after it had been distributed if it was found to be necessary.

The 30 responses were put through the same four tests provided by Hansen (et al) which were used for the content analysis. Based on this, there were no notable issues that made themselves apparent. For the question on years of gaming experience, 25 of the 30 respondents chose the option 10 or more years. In a similar vein, only 5 of the 30 respondents were women. However, this is not necessarily attributed to problems with the analytical categories, and may rather be related to the nature of internet forums dedicated to video games. Other than these two categories, none of the categories appeared to be dominant or absent, and it was concluded that the questionnaire design was adequate.

3.4 Qualitative Interviews

The final step of data collection is to conduct an in-depth interview with respondents from the quantitative questionnaire who volunteered to take part, who for the sake of clarity will be referred to as "informants" from this point. The purpose of this interview was simply to compare the theoretical framework of this paper to the real world experience of gamers. Specifically, the aim was to first investigate how users of virtual worlds experience their relationship with the virtual world and its virtual goods, and their attitude towards microtransactions in this regard. Second, to explore the connection between this experience and the various dimensions of involvement, and by association the theory of modern re-enchantment.

Research design

In conceptualizing the above paragraph into a series of interview questions, I broke it down into two groups: one dealing with the informants motivation to play and level of involvement in their chosen virtual world, the other more specifically aimed at microtransactions, their motivations for engaging in them (or not) and how purchased virtual goods affect their involvement, if at all.

In the first group, the first set of questions was about the informant's previous experience with persistent virtual worlds, as well as his motivation to play in both the specific world he is a current user of, as well as the genre in general. The next set dealt more directly with their definition of the term "immersion" and its relative importance to their gameplay experience. It has already been established that the term is a problematic one to define, and based on the assumption that the informants may not be equally engrossed in the academic debate surrounding it, I decided to include "immersion" in the interview guide, as opposed to referring to Calleja's involvement model that makes up part of the theoretical framework for this study. The overall aim of this group of questions was to collect data on that could be analyzed in relation to the involvement model, to determine if their usage of the virtual world could be determined to be a form of inhabitation.

In the second group, the first set of questions dealt directly with microtransactions: if the informant has ever engaged in microtransactions, and if so, what motivated him to buy the variety of items that he bought. Finally he is asked to give his opinion on the microtransaction model as a

whole. The aim of the second group of questions is to determine what motivates users of virtual worlds to engage in microtransactions, but also to differentiate between different motivations for different types of items. These motivations will then be analyzed in light of the other collected data as well as the theoretical framework in order to postulate whether or not microtransactions are enhancing the user's sense of inhabitation.

The interview guide itself was designed as a semi-structured interview, meaning there was a list of topics to talk about, but attention was also given to the responses from the interview. Since we have already established that the purpose of this study was to be more exploratory than conclusive, it would be necessary to keep an open eye on topics the interviewees might bring up that might not have factored into the theoretical framework of this study. Furthermore, because of the complexities of definition that accompany several of the video game theoretical terminology used in this paper, it was necessary to keep an eye out for these terms appearing in the course of the discussion, and to make sure we were using the same definition, or at the very least to obtain the informants definition of the term.

During the course of the questionnaire, 29 respondents showed interest in taking part in the interview. In the end only 7 of them actually responded to the recruitment e-mail, making any need for sampling the volunteers redundant.

The interview process

After respondents volunteered to take part in an interview, they were e-mailed and asked if they wanted to conduct the interview in-game. The reason for encouraging them to do the interview through in-game chat is based on the assumption that it would be a lower threshold for someone to agree to chat as opposed to conduct an interview over Skype or other software that involved voice and/or picture. Also, by suggesting we conduct the interview in-game, it would guarantee that the interviewee had the required software already installed, as opposed to requesting that they install chat software they might not be familiar with or willing to acquire.

The interview itself took place entirely in text chat. The benefit of this was, as mentioned before, to lower the threshold for a potential informant to agree to the interview. A second benefit was

that the entire conversation remained on screen, which enabled reviewing the interview in order to create follow-up questions, as well as greatly simplifying the transcription process. One potential criticism for using text exclusively could be that it is not a completely natural mode of communication, meaning for example that some of the visual cues involved in inter-human communication were absent, as well as the fact that it is hard to tell when an informant is done typing and you can move on to the next question without interrupting his answer to the previous. I believe, however, that this negative effect is at least dampened by the fact that the users of virtual worlds are well versed in the use of text based chat as a mode of communication, as it is a common feature in most titles. If the informants were, for example, senior citizens not used to communicating through computer mediated text, it would most certainly have had a negative effect on the validity of the data collected. As it were, my personal experience of the interviews was a positive one, and informants would often finish their first answer before moving on to the next in the event of overlapping questions.

4. Analysis

Through the data analysis, the research questions will be explored in three steps. First, the data from the content analysis will be used to categorize the available virtual goods in the sample of meta-stores, and more importantly to link them to Calleja's dimensions of involvement in order to show that there is a link between the virtual goods sold in meta-stores and the user's experience of virtual worlds. Second, the data collected from the questionnaire will be analyzed to determine if there is a "type" of player that is more likely to engage in microtransactions, and also to examine if there is a link between Yee's motivations for play and buying virtual goods. Finally, the interviews of virtual world users will be analyzed to gain an insight into how the customer relates to the items he buys through microtransactions, and how he personally feels they affect his gameplay experience, if at all.

4.1 Content Analysis

The purpose of the content analysis was to get an overview of the exact kinds of virtual goods available in the meta-stores of the selected game titles, as well as to assess if any tendencies could be discerned in terms of types of goods available in and across game titles. This data will contribute to answering the research question primarily by allowing the categories of virtual goods to be analyzed through the lens of the existing theory in order to have a theoretical idea of what types of goods invoke which aspects of re-enchantment.

Before moving on to analyzing the data, it will be necessary to point out an issue encountered during the coding process. Two of the game titles, *Dungeons and Dragons Online* and *The Lord of the Rings Online*, had a feature in their meta-store which excluded the user from viewing content he was not qualified to use, for reasons such as insufficient level or other progress in the game. For this reason, one must make the assumption that the quantities measured from these sources are lower than the real quantity of virtual goods. While this certainly undermines the validity and reliability of the data, I still believe it is useful in determining the general tendencies of focus for these two meta-stores.

Finalizing categories

One of the main purposes for the content analysis was to establish which categories of virtual goods were available. It is clear from the data collected in this respect that the originally theorized categories were insufficient, and that reorganization was in order. One category which emerged, which I titled "Account", deals mostly with what I would call administrative tasks, such as adding additional content, character slots and in other ways enhancing your user account. I feel this falls outside the focus of this paper, and will be set aside for the purpose of analysis. We are then left with three main categories:

Item	**Convenience**
Functional - Armor	Resurrection
Functional - Weapon	Storage
Functional - Weapon - Ammo	In-Game Service Token
Functional - Accessory	Travel
Functional - Pet	Mount
Functional - Tools	Ingredients
	Skill Reset
Cosmetic - Armor	Summonable
Cosmetic - Armor Dye	Cooldown Reset
Cosmetic - Weapon	Other
Cosmetic - Accessory	
Cosmetic - Appearance	**Buff**
Cosmetic - Pet	Permanent - Avatar
Cosmetic - Costume	Permanent - Item
Cosmetic - Housing	Permanent - Mount
Cosmetic - Mount Appearance	Permanent - Avatar Creation
Cosmetic -Social	Temporary - Avatar
	Temporary - Item
	Temporary - Accelerator
	Temporary - Map
	Other - Potion

The emergence of the "Convenience" category is a notable feature, as it was not something that was accounted for in the theoretical framework of this study. It is not heavily represented in terms of sheer numbers, with an average of 11.2 % of meta-store goods falling into this category. I believe this can be explained by the simple fact that the availability of convenience goods is more dependent on quality rather than quantity. You only need one item that resurrects the avatar if he meets an untimely end, for instance, whereas it makes more sense to have a large variety of appearance altering items in an attempt to reach a broader selection of potential customers.

In the interest of clarity, the above items need to be re-categorized in order to ensure that each category is an exclusive list of virtual goods. To that end, I have made the following new categories: "Performance", which includes every item from the "Functional" sub-category of "Items", as well as the entire "Buffs" category; and "Appearance" which contains the "Cosmetic" sub-category of "Items". Together with the "Convenience" category, these three make up the entire catalogue of virtual goods that are relevant to this study.

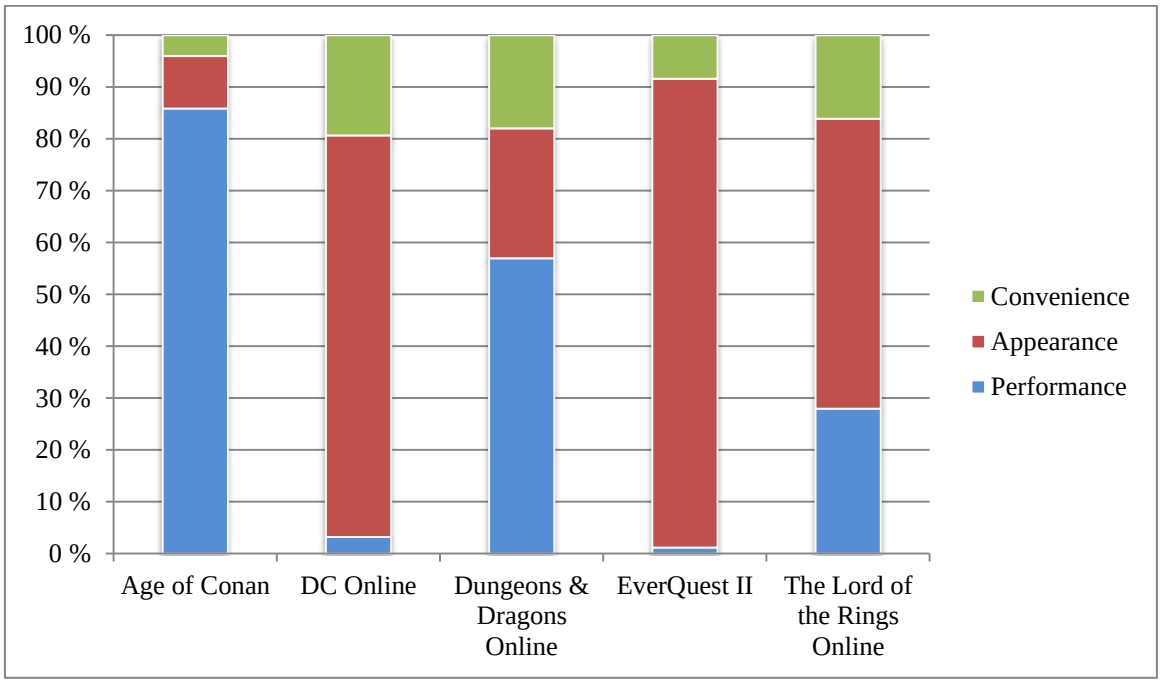

Figure 1, percentage of meta-store content by category

Another observation made during the content analysis is that the various game titles have a very distinct focus on one of the above categories, as clearly illustrated by Figure 1. *Age of Conan* and

Dungeons and Dragons Online both had the majority of their items fit within the Performance category, while the remaining titles, *DC Universe Online*, *EverQuest II*, and *The Lord of the Rings Online*, all had their majority in the Appearance category.

Connecting categories with involvement

When attempting to fit these categories into Calleja's framework, it seems fairly obvious to state that the goods in the Performance category have an effect on the user's ludic involvement. If we understand the conflict in games as a battle of numbers (the attacker's weapon strength versus the strength of the defender's armor, for example), then it is safe to say that any virtual good that enhances these numbers also alters the challenge experienced. On one end of the argument, one might state that buying Performance goods allows the user to tweak his avatar's abilities to perfection, while on the other end it could be argued that users can pay to make up for their lack of skill, effectively purchasing their way to victory. One might be tempted to call this cheating, but then again if the game developers, who created the ludic aspect of the game to begin with, allow and promote the purchase of this type of virtual good, then it must by default be a legitimate action within the game's rules.

Appearance items are a bit trickier to place. On the one hand, one could make the argument that they fit within the narrative dimension, as the appearance of the avatar may be understood as part of the alterbiography, or the emergent narrative surrounding the avatar as the user plays the game. The appearance of the avatar might be an aspect in which the user is made to feel a part of the game world, by having a game-cultural specific outfit. Alternatively, if we take Finkelstein's argument about expressing personality through clothing into consideration, we might be able to say that Appearance goods are a part of the shared involvement. In other words, when playing in game worlds that involve other people, the appearance of the avatar may be understood as an extension of the real world desire to dress and appear a certain way. Finally, there is affective involvement to consider. Calleja argues that the aesthetic value of the world design affects the affective involvement of the user,[87] and I would make the argument that the same can be said for the aesthetic appearance of the avatar. If aesthetically pleasing scenery can enhance the

[87] Calleja, *In-Game*, 142

involvement of the user, then finding the appearance of your avatar aesthetically pleasing should as well.

Finally we will attempt to place the Convenience category. This is, of course, made complicated by the fact that the goods represented within it are greatly varied in nature. While being able to instantly resurrect your character and carry on as if nothing happened certainly can be placed within ludic involvement, buying a good that allows you to instantly teleport to a desired area of the game world could be said to be part of the spatial involvement. It can be said that the majority of goods found in this category were of a ludic nature, in that they allowed the user to progress through the game faster than usual in a variety of ways, such as accelerating the rate at which their avatar gains skills or levels.

4.2 Quantitative Questionnaire

Even though the questionnaire was developed primarily to recruit informants for the in-depth interview, it also collected data that can be valuable to analyze. It can be used to determine if there are certain demographics that are more likely to engage in microtransactions, and an interpretation can be made to connect Yee's theory of player motivation with the willingness to engage in microtransactions.

Demographics

Unfortunately, women were underrepresented in my questionnaire sample, and out of 242 respondents only 15% were female. This is comparable to other, similar studies. Nick Yee's *Daedalus Project*, a survey of *World of Warcraft* players that ran from 1999 to 2004, had 16% female respondents.[88] In a study from 2009 conducted by Nicholas Duchenaut (et al) on the topic of avatar personalization, the amount of female respondents was 35%.[89] A 2011 study conducted

[88] Nick Yee, "WoW Basic Demographics" in "The Daedalus Project", accessed May 15, 2013, http://www.nickyee.com/daedalus/archives/001365.php
[89] Nicholas Ducheneaut et al., "Body and Mind: A Study of Avatar Personalization in Three Virtual Worlds", (Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2009), 1153

by Nick Yee (et al) on expression of personality in World of Warcraft had 26%.[90] Finally, a study by Dmitri Williams (et al) from 2008 which aimed to map out the demographic of gamers gathered 19.2% female respondents. [91]

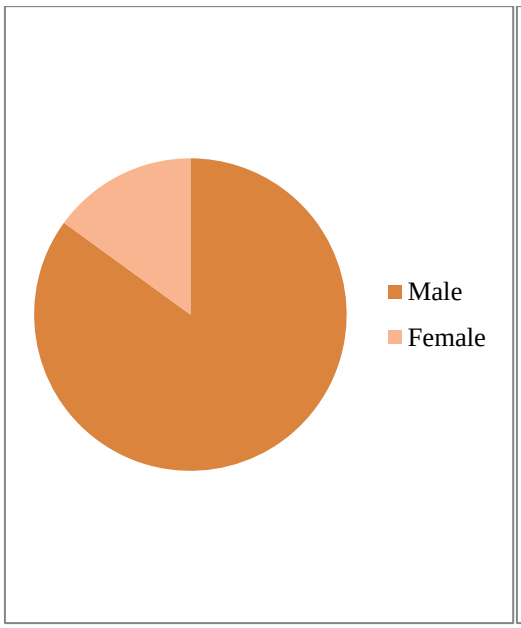

Figure 2, respondents by gender

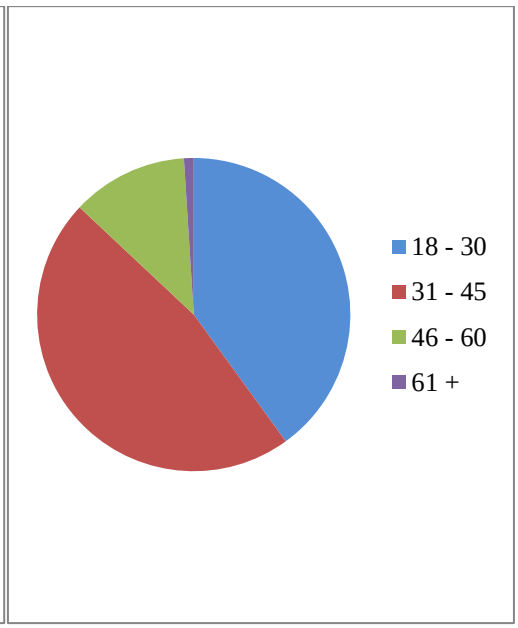

Figure 3, respondents by age

The gender distribution of my sample determines how representative my sample is, and while it is clear that the amount of female respondents varies wildly between surveys, it is also apparent that my study has landed in the lower end of the spectrum, and so it is clear that when it comes to gender my sample can hardly be classified as representative, especially when considering the Entertainment Software Association in 2012 estimated that 47% of game players are female.[92] On the other hand, the ESA report lacks data on the gender distribution among the various genres of games. This means there is no way of determining the female population of online worlds, apart from gaining access to the "walled gardens" of data in the possession of the video game companies. Looking at the studies cited, however, there is the tendency of growth of the female population. The studies from 2008 or earlier all had less that 20% female respondents, while the

[90] Nick Yee et al., "Introverted Elves and Conscientious Gnomes: Expressions of Personality in World of Warcraft", (Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2011), 756
[91] Dmitri Williams, Nick Yee, and Scott E. Kaplan, "Who plays, how much, and why", 1002
[92] "2012 Sales, Demographic and Usage Data: Essential facts about the Computer and Video Game Industry," Entertainment Software Association, accessed May 15 2013

newer studies all had over 25% females. In this light my sample once again falls short, and so the conclusion must be made that the representativeness of my sample suffers from an underrepresentation of women.

The vast majority of respondents were video game veterans, with 81% reporting 10 years or more of experience. Only a single respondent (0.4%) had played for less than 1 year, while 2% had between 1 and 3 years of experience, meaning that a mere 2.4% of respondents had less than 4 years of experience playing video games. Data from the Entertainment Software Association shows that the age of the average gamer is 30 years old,[93] compared to 40% of my respondents being in the age bracket 18-30, and 47% in the bracket 31-45. This means that, in terms of age, the average gamer is found right on the border between my two most populated age brackets, and although these brackets span several years, I believe this helps strengthen the representativeness of my sample.

Motivation to play

Part of the design of the questionnaire was to include a modified form of Nick Yee's theory of player motivation, which is divided into three main categories: Achievement, Social, and Immersion. In the questionnaire, this was translated into the respondent rating the importance of the following aspects of gameplay on a 1 to 5 scale (5 being most important): Quality of equipment, rarity of equipment, appearance of equipment, immersion in game world, overcoming challenges, and social interaction. The aspect that most often received a high ranking was overcoming challenges, which was ranked 4 or higher by 83% of respondents. The next highest was immersion, which 73% of respondents rated 4 or higher. Next was having aesthetically pleasing equipment, which 53% rated 4 or higher. Social interaction was rated 4 or more by 50% of respondents, while 40% rated having powerful equipment 4 or higher. Finally, only 31% found having unique equipment to have an importance of 4 or higher.

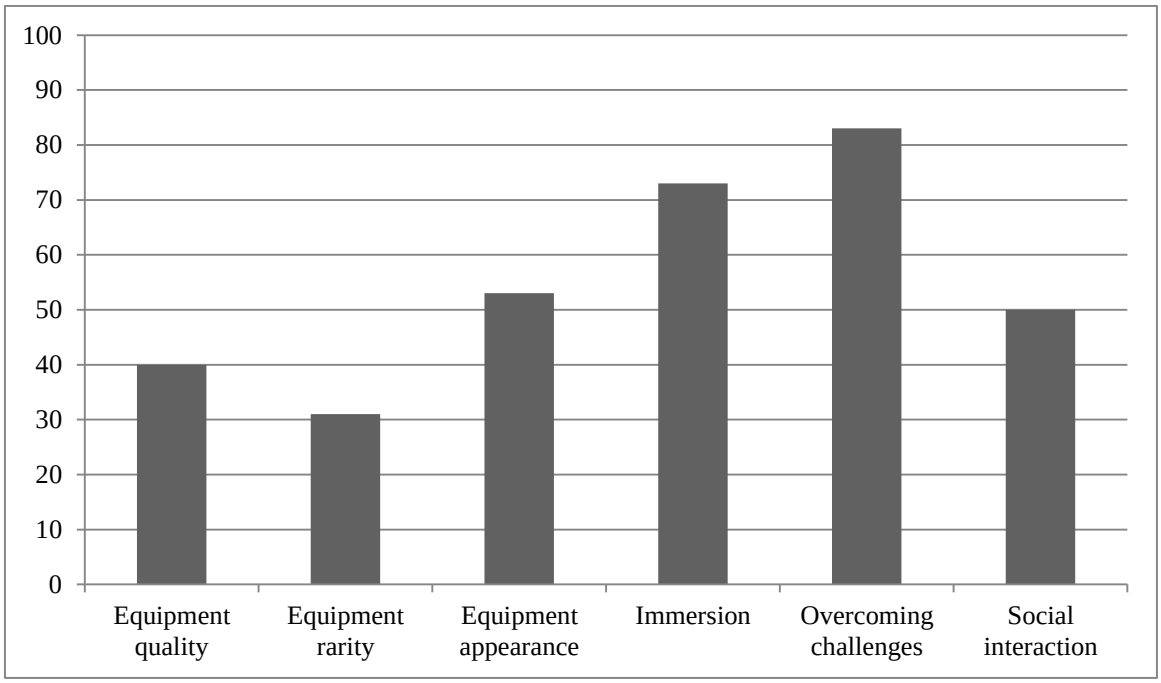

Figure 4, percentage of respondents ranking aspects of gameplay 4 or higher (out of 5).

From this we can draw that Achievement is the highest ranking motivation among the respondents, which along with Immersion were the motivations to receive a high rank by a strong majority of the respondents. What is interesting to note is that while overcoming challenges was the highest ranked, the two other aspects of gameplay that are also in Yee's Achievement category were the least highly ranked aspects of gameplay.

Microtransactions

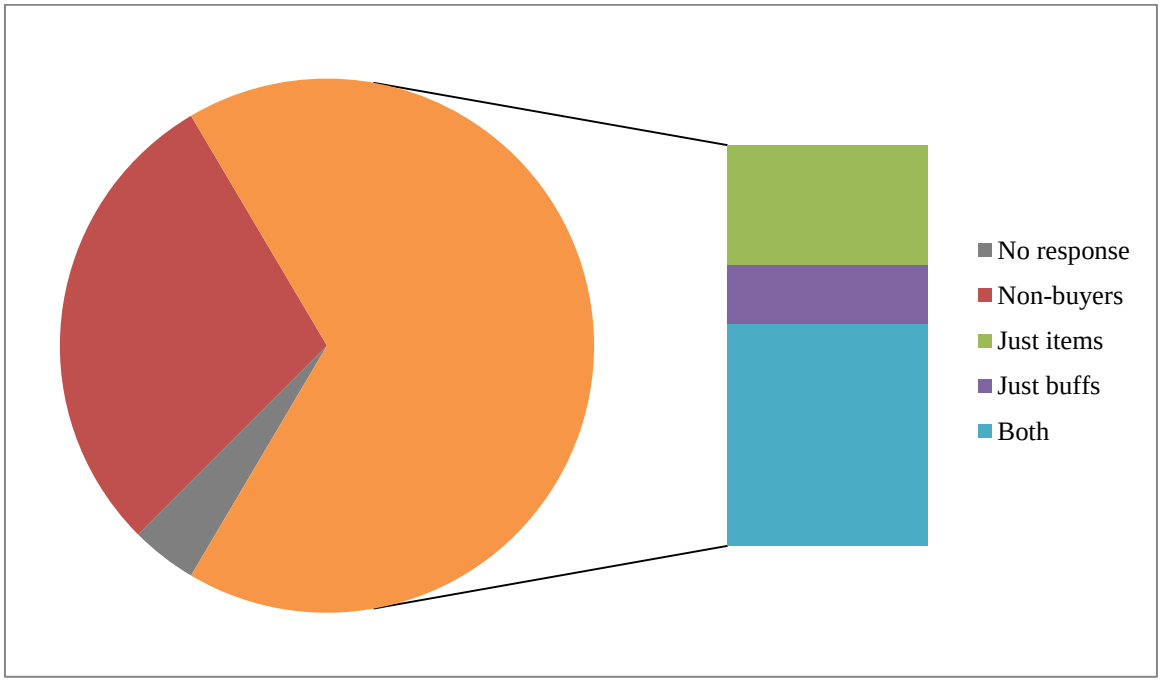

Figure 5, percentage of users who have bought virtual goods

When it comes to microtransactions, 57% of respondents reported having bought in-game items using real world money, while 47% said they had bought buffs. 29% had bought neither, while 4% left these fields blank. 20% reported having only bought items, while a mere 10% had bought only buffs. From this we also see that 37% of respondents had bought both. This makes the total amount of respondents who have engaged in microtransactions 67%. Based on these figures, we see that the majority of my sample has at some point engaged in item-based microtransactions, while slightly less than half of the respondents have bought buffs. In fact, items stand out as the more popular purchase, although despite having twice the number buff-only buyers, the amount of respondents who had bought only items where relatively low. This may be caused by the fact that both categories of purchases are bought with the same meta-currency, and this currency is usually sold in fixed amounts, meaning if a player buys meta-currency to buy an item, he will often have to buy more currency than the item costs, leaving him with surplus currency that is only valid in that game's store. In other words, buying currency for one category of virtual goods automatically opens the door to buying the other. This does not account for the fact that there

were more respondents who had bought items, but not buffs, and hopefully the interview analysis will shed some light on this popularity.

From the perspective of gender, 79% of the female respondents and 53% of the male respondents reported having bought items, while the numbers for buffs were 58% and 45%, respectively. Even though the percentage of female respondents was too low to get a representative sample, this none the less indicates a tendency that items are more popular with women than men.

Motivation and microtransactions

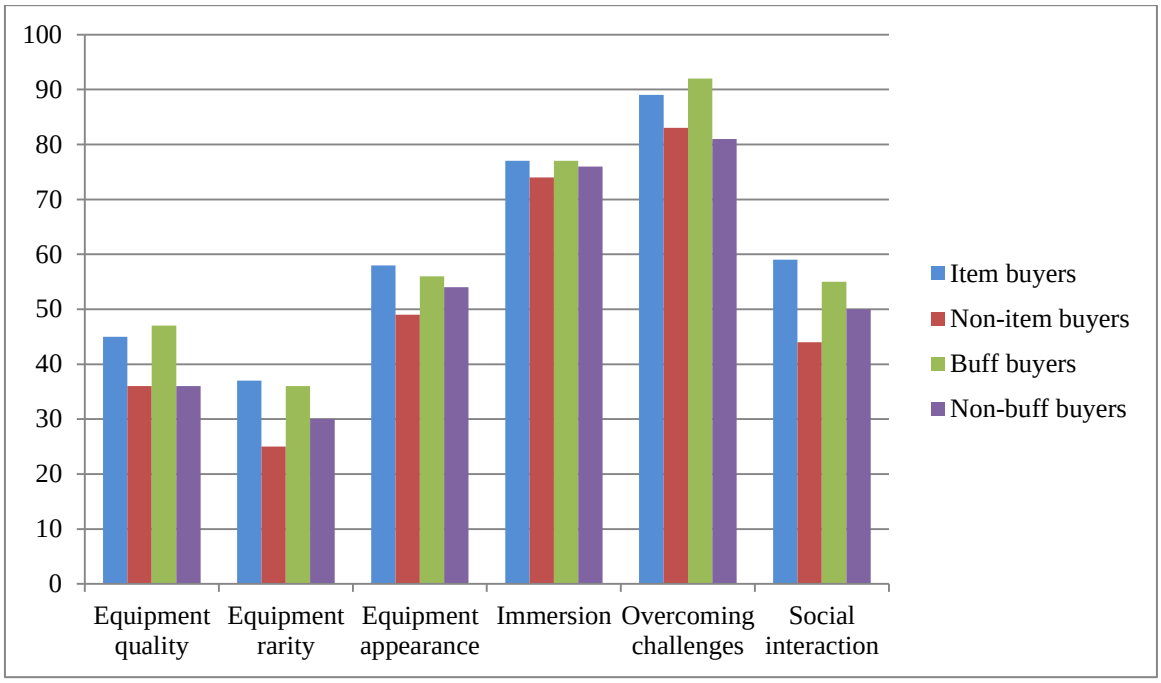

Figure 6, percentage of buyers and non-buyers rating aspects of gameplay 4 or higher

Out of the 57% who bought items, 89% ranked overcoming challenges highly, compared to 83% of those who had not. 77% of item buyers rated the importance of immersion 4 or higher, while 74% of those who had not bought items gave it the same rating. 58% of item buyers rated having aesthetically pleasing gear 4 or more, compared to 49% of those who had not bought items. The quantities of item buyers who gave high ranks to social interaction and powerful equipment were 59% and 45% respectively, compared to 44% and 36% of non-buyers. Finally, 37% of those who

had bought items rated the value of having unique gear 4 or higher, compared to 25% of those who had not bought items.

Doing a similar comparison of respondents who have bought buffs and those who had not, the ratios were 92% and 81% for challenges, 77% and 76% for immersion, 56% and 54% for aesthetic gear, 55% and 50% for social interaction, 47% and 36% for equipment quality and finally 36% and 30% for gear uniqueness.

Analyzing the data

The data shows that Achievement and Immersion are the two of Yee's categories of motivation that are strongly favored by the respondents, while the Social category is not represented until the 4th ranked aspect of gameplay. However, if you go along with the argument presented previously of the appearance of the avatar as a social aspect of gameplay, this moves the Social motivation to third place. This is interesting considering the fact that the genre of virtual worlds studied is what is known as "massively multiplayer", and yet actually interacting with other players is the lowest ranked motivation.

When attempting to link motivation with microtransactions, there are no strong connections between the two. When comparing those who had bought with those who had not in both categories of microtransactions, we find that the difference in motivation ranking is on average 9% between those who bought items and those who did not, and 6% in the buff category. One interesting point is that the buyers always had more respondents who gave high rankings, which might suggest that buyers of virtual goods feel more involved or a stronger motivation to play.

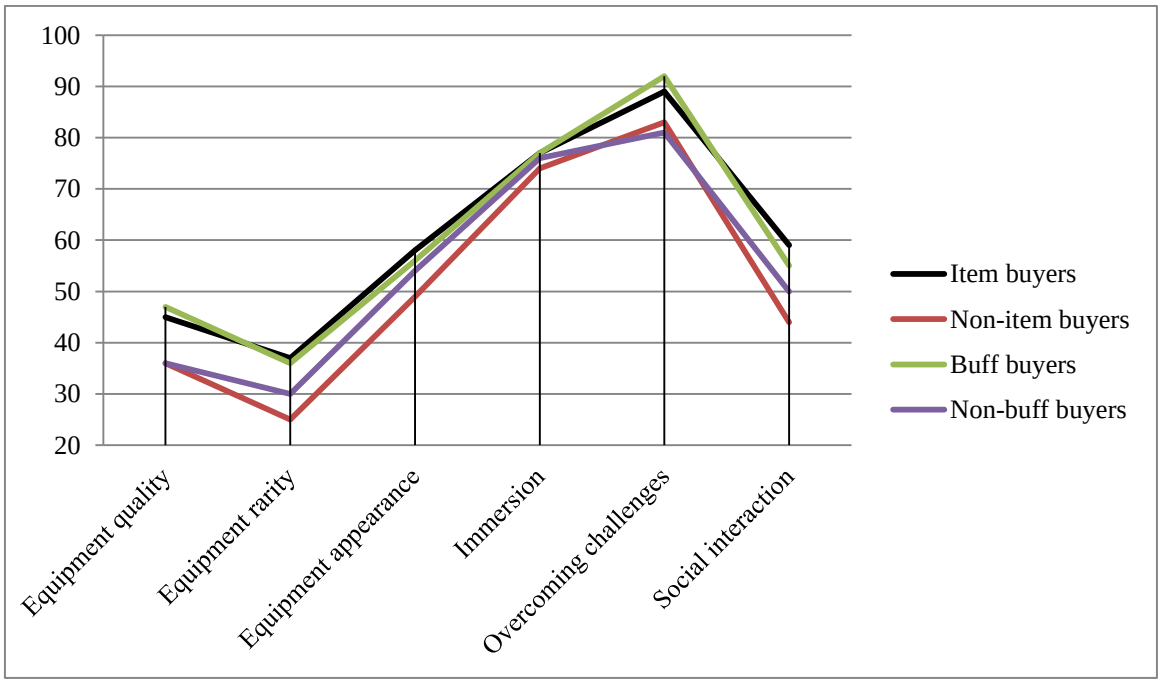

Figure 7, percentage of buyers and non-buyers rating aspects of gameplay 4 or higher

Looking at where the highest discrepancies are found, it is perhaps not surprising that 11% more buff buyers than non-buyers rank overcoming challenges highly, considering that items found in the buff category help improve your performance in the game. When it comes to buying items, the highest discrepancies were found in social interaction and uniqueness of gear, with 15% and 12% more buyers than non-buyers giving a high ranking. This might be an indication that, to once again reiterate Finkelstein's theory of appearance, the aesthetic qualities of the avatar are a part of the social experience for some users as it allows them to convey their personality to their fellow players.

Figure 7 shows us more clearly that there are no major discrepancies between those players who buy and those who do not buy, and apart from the fact that buyers consistently rank every aspect of gameplay higher than non-buyers, the curves follow the same tendencies. One possible explanation for this is that it is generally possible to experience the aspects of gameplay that you are motivated to experience through the game, without having to engage in microtransactions. This could mean that those who show higher motivation in certain aspects of gameplay by ranking them high in importance, believe these aspects are worth supplementing with goods available in the meta-store.

4.3 Qualitative Interview

The purpose of the in-depth interviews was to gain insights into how users are involved in their virtual world of choice, and how the microtransaction purchases (or lack thereof) they make relate to their experience in the game, and attempt to link their responses to Calleja's dimensions of involvement. A total of 7 interviews were conducted, and in order to maintain the anonymity of my informants, they will be referred to by their respondent number from the questionnaire.

Spatial and narrative involvement was omitted from this analysis because it was not adequately represented in the responses of the informants.

Kinesthetic involvement

A theme that was repeated by most informants was their enjoyment of the in-game combat. While this may sound like ludic involvement, the following quote helps illustrate why it belongs under kinesthetic involvement instead:

> *"I love being able to kill things and actually see it happen as if I really was there"*
> *-Informant 118*

The emphasis here is on being in control and seeing your actions come to life on the screen, as opposed to the more ludic approach of maximizing combat efficiency or developing winning strategies. Of course, things like combat and character animation are integral parts of the game code, and it stands to reason that this aspect of gameplay cannot (or at least, should not) be altered through anything bought from the meta-store.

Several informants reported they enjoyed building houses in the game world.[94] I would argue that this type of gameplay fits under the dimension of kinesthetic involvement, as raising a structure of your own design can be said to relate to the player's agency within the game world. Beyond the specific aspect of building houses which may serve as a major motivation for *EverQuest II* players to become involved in that specific virtual world, however, the concept of agency was found to be important to informants who play other titles as well:

[94] Out of the worlds in my sample, this is only possible in *EverQuest II*

"The ability to shape my environment helps create the illusion that I'm [in] a fantacy [sic] world that I have control over or at least impact on."
-Informant 238

It is clear that the ability to impact their virtual world (or at the very least the illusion thereof) is important to players. In terms of microtransactions this concept was not repeated by the informants, apart from *EverQuest II* players having purchased decorations for the houses they have built.

Shared involvement

Community was one of the major themes that came up across all interviews, and it is perhaps not surprising considering the cohabitation with other people is one of the major selling points of the genre. This could present itself in a variety of ways, from a supplement to regular social interaction:

"there are also real life friends I coordinate with to play online, they're in different states so it's the only real way we can hang out"
-Informant 241

to a surrogate:

"unfortunately I can no longer work so this game gives me adult conversations"
-Informant 118

As a testament to the social nature of persistent online worlds, informants found that thanks to either integrated chat systems found in the game, or third party voice chat services such as Ventrilo, they could interact with other people even if they were playing by themselves:

"My guild uses ventrilo, so even when I'm playing alone, I'm not really alone [...] we chat quite a lot while playing"
-Informant 142

Social interactions involved both strangers met through the game as well as with friends from the real world. There were also several reports of friendships, and even a marriage, resulting from meeting through the game.

Interestingly, a common concern among the informants was that microtransactions might cause their fellow players to perform badly in situations where several players were working together to achieve goals within the game. The reasoning behind this being that if they are allowed to purchase equipment and performance boosts through the meta-store, they will be able to "cheat" their way to higher levels and not learn how the game works as a result, and consequently not be able to carry their own weight in shared endeavors. One informant, when voicing this complaint, referenced an actual item that is available through the *Dungeons & Dragons Online* meta-store that allows the buyer to advance his avatar directly to level 16:

> *"those dumb stones [...] let people skip from 8-16 for free. they never learned what DB, heavy fort or anything else did. they died. the parties they joined were unhappy, they were unhappy, it was a bad idea."*
> *-Informant 238*

This was one of the few cases in which microtransactions were believed to have directly negative consequences.

Affective involvement

Affective involvement was another dimension that frequently came up during the interviews. The concept of escapism is one of the major themes in this category, and several informants reported using the game world to take a break from real-world worries:

> *"my immersion though, is roleplaying [my character], becoming him for just a short while and letting go of the stress real life brings"*
> *- Informant 93*

Others, to simply experience something they would not otherwise be able to:

> *"you wonder what it would be like to have magic or fly or walk through walls. realistically you can't do that in real life but in a gaming environment that is entirely possible"*
> *-Informant 241*

Like the rush of combat mentioned under kinesthetic involvement, this form of affective involvement is something that is inherent in the game and cannot easily be commoditized, except through expansion of content, which usually falls outside the scope of microtransactions. Consequently, the microtransactions were not linked to this aspect of affective involvement.

Another theme that came up was the aesthetics of the game world. While one aspect of this was the enjoyment of visually pleasing graphics, a more interesting theme that came up was the connection between the appearance of the avatar and the player's affective involvement. Having a visually unappealing avatar was in some cases a detriment to their involvement:

> *"if [an item's appearance] annoys you constantly and you can't do anything about it that breaks immersion, cos [sic] in real life you could"*
> *-Informant 50*

At least it would have been had it not been for the opportunity to purchase items that alter the appearance of the avatar. Aesthetics influenced purchases in other ways as well, from the desire to stand out among the other avatars to giving the avatar a visual representation of the user's real-world faith. Aesthetics were frequently linked with player involvement, and purchasing appearance-altering items appeared to be a way in which players enhanced their involvement in the virtual world:

> *"I think I like my characters to look pretty, it's just a matter of aesthetics"*
> *-Informant 138*

> *"I would spend more RL money if they would have decent cosmetic items"*
> *-Informant 238*

Ludic involvement

One way ludic involvement came up during the interviews was in the level of dedication that could be applied to improve their avatar and become better at the actual game aspect of virtual worlds. Some informants stated they enjoyed taking a casual approach to the challenges found in the game world:

> *"[I like] the relaxed game play, not that it's easy, but I can go solo and let my toon stroll, take pictures"*
> *-Informant 138*

Other informants reported finding enjoyment in the process of tweaking every number and percentage in order to make their avatar as powerful as it could be within the restraints given by the game's rules, and not necessarily just for combat:

> *"a hagglebot is a character designed to give you the maximum selling power and buying power so i can buy stacks of scrolls much cheaper on this than a character with very little haggle [...] saves and makes me more plat"*
> *-Informant 50*

Whenever microtransactions interplayed with this aspect of ludic involvement, it came in the form of permanent boosts to performance, but sometimes also as experience gain enhancers, meaning an acceleration of the rate the avatar gains levels and abilities.

Another aspect of ludic involvement appeared in terms of in-game achievements. Informants frequently acknowledged that the things they achieved in the game world were not "real", but they still felt a sense of pride in their achievements:

> *"It may not be tangible, but I feel like they are accomplishments and I enjoy it"*
> *- Informant 238*

In terms of when microtransactions came up in this context, achievement was usually the foundation for criticism. One common perspective was similar to the concerns discussed as part of shared involvement, where users could simply buy their way to power and thereby cheapening their achievements and enjoyment of the game:

> *"once you take that first step eventually gear that effects game play will be on the marketplace and then it will not be about the work you put forth but who can afford to buy gear... i'm poor... i can't afford to buy items so [I] can have fun"*
> *-Informant 93*

That having been said, the common view on the connection between microtransactions and achievements was that many informants preferred not to buy anything that could be achieved through gameplay:

> *"an adventure pack will give me hours of entertainment, over and over but a +3 tome is just a fast track to something I can get in game anyway"*
> *-Informant 238*

In fact, several players took great pride in earning rewards through their own effort rather than buying them through the meta-store:

> *"that wall trophy was another long and drawn out quest to get [...] that sense of completion was fantastic you can't get that with buying stuff"*
> *-Informant 93*

Other findings

One of the themes that occurred quite frequently, but do not fit easily inside Calleja's dimensions of involvement, was time. Balancing the desire to become involved in the virtual world with the demands of real life was an issue for several informants. In fact, because of this time limitation, some informants reported giving immersion a low ranking in the questionnaire, stating that due to time constraints they are actively trying to avoid becoming too immersed in the virtual world:

> *"I have too much RL to get too immersed. Kids, fiancee [sic], dinner, appointments, it is not good for me to lose track of time"*
> *-Informant 238*

Being involved in the game world retains its positive connotations in this context, but it also makes apparent that escapism is not a luxury everyone can make time for.

> *"I think I'm the most happy when I can blow through a quest in 15 minutes to get the chest at the end while a normal group would take 2 hours. I see that as a net profit of an hour and 45 minutes to do something else."*
> *-Informant 241*

Because users of virtual worlds have limited time to play the game, it makes sense that there are convenience items available to help them achieve their goals and enjoy their gameplay experience despite having less time to invest, by enhancing the capacities of their avatar or reducing the likelihood of failure.

Another barrier that appeared frequently was the uncertainty of the existence of the virtual goods that can be purchased, linking it to the fact that once the game servers go down the goods they have bought disappear with it. Because of this, informants felt a certain reservation about potentially losing their virtual belongings:

> *"the drawback of buying something in-game is that the value is in how long the game will last"*
> *-Informant 241*

The same can be said about other aspects of the game, however, such as the time invested in your avatar, the equipment gathered and the skills learned, all of which will disappear once the game servers go down. This does not dissuade people from engaging themselves in the game world and investing time in their avatars, and consequently most informants reported having bought virtual goods regardless.

Personal finance was frequently mentioned as another barrier to engaging in microtransactions. Once again the needs of the real world interfered with the desires of the virtual, and failing to justify the expense was one barrier reported. In fact, a theme that appeared in regards to personal finance was that the player needed to have disposable income in order to consider buying virtual goods, and in this way it becomes more like any other hobby:

> *"As a hobby, DDO is fairly inexpensive. I spend 100X that much on scrapcrap for my papercrafting."*
> *-Informant 238*

This is a fairly predictable stance to take, however, and it only shows that my informants, at least, have a healthy relationship with microtransactions and put their own needs in front of those of their avatar.

Conclusions

Two of Calleja's dimensions of involvement did not come up frequently enough during the interviews to warrant a place in the analysis, but I do not believe this is because the informants do not experience this level of involvement. Rather, I believe they are not aware that they are experiencing them. As mentioned, Calleja's dimensions are the result of the academic need for a concise understanding of the term "immersion" that is frequently thrown around but often with a blurry definition. Because of this, the "layman" may not have knowledge of these dimensions and consequently may take these dimensions of involvement for granted. The spatial dimension of involvement deals with navigating the game world, and familiarizing oneself with it, and one might postulate that a population of gamers well-conditioned in the entering and exploration of virtual worlds may find that this becomes second nature. Furthermore, since the narrative

involvement in persistent online worlds were largely absent, we might conclude that the narrative is not something that draws users to virtual worlds, but rather the promise of kinesthetic, shared, affective, and ludic involvement. However, how many users consider alterbiography a part of the game's story? It certainly is never treated as such by the game itself, but that does not negate the fact that events happened within the game world that involved one or several players, and this can be considered a part of the narrative. Perhaps it is once again the lack of knowledge of video game academics that is the result of this dimension of involvement being underreported.

What the interviews show, however, is that the four remaining dimensions of involvement are frequently reported, and not only are they experienced by the users, but they frequently make purchases in the meta-stores with the motivation of enhancing the aspects of gameplay that cause this involvement. From this we can safely conclude that microtransactions are in fact being used as a tool for users of virtual worlds to enhance their involvement in their secondary worlds.

5. Discussion & Conclusions

The purpose of this study was to explore the connection between Saler's theory of modern re-enchantment and the motivations of users of online virtual worlds to engage in microtransactions. To this end, this connection was broken down into two questions:

> *1. Can we consider inhabitation of literary "secondary worlds" to be the same or a similar phenomenon to the immersion in digital virtual worlds?*
>
> *2. Do the player's motivations to engage in microtransactions intersect with the above phenomenon of inhabitation/immersion?*

Inhabitation and immersion

After replacing the term "immersion" with the more satisfactory concept of "incorporation", the data from this study suggests that the terms "incorporation" and "inhabitation" are used to describe the same phenomenon.

It is, however, important to clarify that the terms themselves are not identical. Inhabitation of secondary worlds is used to capture what Tolkien describes as mentally entering and experiencing a secondary world, one that is accessed through literature and is perceived as real for as long as you inhabit it. At the time of Tolkien's writing, online virtual worlds would not be invented for several decades. This is significant, because they bring several things to the table: the ability to use the power of computers to maintain the "inner consistency of reality"; graphics that can display the secondary world in its entirety, without the need for machinations or tricks of lighting to bring the fantasy to life, which are points of contention for Tolkien in terms of the theatre qualifying as a secondary world; and most importantly, the ability for the user/reader/consumer of the secondary world to not only enter, but also act within the world. For this reason the two terms, inhabitation and involvement, are used to describe, by different approaches, the same phenomenon: that of entering and experiencing secondary worlds as real places. The difference is Tolkien talks about the secondary worlds of literature, while Calleja describes the additional means of inhabitation afforded by the virtual worlds of the video game medium.

This is significant because it shows that the phenomenon of being immersed in a fantasy world is not something that has cropped up alongside video games, but is in fact a part of a cultural process which predates video games.

Microtransactions and inhabitation

The data from this study has shown that users of virtual worlds frequently refer to concepts associated with incorporation/inhabitation as their motivation to engage in microtransactions.

It is, however, important to note that this does not mean that microtransactions are required in order to experience inhabitation. The data collected shows that there are no specific "types" that engage in microtransactions, and more importantly that in terms of motivation to play there are no significant differences between those who engage in microtransactions and those who do not, with the exception that those who do engage in microtransactions are slightly more likely to find the various motivations to play more important to their overall experience. While it is possible to interpret from this that those who engage in microtransactions are more likely to have a higher feeling of motivation and inhabitation, I believe the real answer is one that was almost unlooked for. During the course of the interviews, data emerged which suggested that in addition to enhancing their sense of inhabitation, users of virtual worlds were influenced by two factors when considering microtransactions: time and money.

Time appeared in two different ways; some users would rather invest time than money in the game world, meaning they would rather earn items and rewards through gameplay than to pay to take a shortcut. They felt part of their feeling of involvement came from working and achieving goals, in fact some stated that if they could buy everything as opposed to earning it, then the game would be pointless to them. On the other hand, a different group of informants reported that they had very little time to spend away from the real world and for them it was more important to squeeze as much out of the time they had to spend in the virtual world as possible. Considering this latter group it makes perfect sense that there exists a category of virtual goods focused on the convenience of the player, be it through making the player more likely to win or through minimizing the penalties of failure.

Money also appeared in the interviews in two different ways. On the one hand, there were those who viewed their virtual world like any other hobby, and microtransactions were justified as being cheaper than many other hobbies. On the other hand, those who reported having low disposable income were less inclined to engage in microtransactions, and incidentally were more likely to prefer working to achieve bonuses rather than buying them.

This does not mean that time and money are the primary motivators for engaging in microtransactions, nor that the sense of inhabitation is irrelevant. Instead, time and money appear to potentially hinder or encourage the user to engage in microtransactions, but when it comes down to actually buying something, it is the aspects of gameplay that are associated with inhabitation that are given as the primary motivator.

It is worth noting that it is possible for microtransactions to sabotage the sense of inhabitation. Several users express concern that microtransactions allow others to buy their way to success and consequently failing to perform adequately at tasks that require cooperation with other players. Another concern voiced was that microtransactions would cheapen their sense of achievement by allowing other players to simply buy what they had worked hard to achieve. In this way, microtransactions corrupt the internal coherence of the secondary worlds and force the users out of the state of inhabitation. Microtransactions are for that reason a doubled-edged sword in relation to the user's sense of inhabitation.

Connecting microtransactions with modern re-enchantment

This paper has shown that it is possible to place the phenomenon of microtransactions into the context of modern re-enchantment.

This does not mean that microtransactions are required to achieve a sense of re-enchantment. Rather, if the data suggests anything it is that it is the virtual worlds themselves that provide the users with a sense of re-enchantment, as it is presented by Saler. In the context of re-enchantment, microtransactions become more of a supplement than a primary source. Users engage in microtransactions in order to enhance their sense of inhabitation in the virtual world, which in turn shows that inhabitation of virtual worlds are a form of re-enchantment. The

relationship microtransactions have with modern re-enchantment is therefore one by association with virtual worlds, and not through any characteristic inherent in the phenomenon of microtransactions.

Concluding remarks

Every study has its limitations, and it is important to be aware of the perspectives which are missing from this paper. Primarily, it is important to acknowledge that this study is more of an explorative effort than a comprehensive look into microtransactions, user motivations, and the context of modern re-enchantment. As such, it does not go in-depth into the effect time and money have on the user, beyond what the users themselves report. It would be interesting to obtain a clear picture of how income and spare time influence not only the user in regard to microtransactions, but also how these factors influence the experience of inhabitation for the individual user. Furthermore, this study has operated outside the "walled gardens" of the video game developers, meaning it has been difficult to obtain a representative sample of informants. Women are grossly underrepresented in the questionnaire, and as such it is not possible to make any generalization around gender and microtransactions, which would have provided an interesting perspective.

As an explorative study, however, this paper has succeeded in showing that it is at the very least plausible to make a connection between the ways users experience virtual worlds, as well as supplement this experience through microtransactions, and the theory of modern re-enchantment. Furthermore, the increasing tendency to spend one's spare time in virtual worlds can be understood in the context of modern re-enchantment as an ongoing cultural process, and it appears a possibility that the threshold for buying virtual goods with real-world money will only be lowered as this cultural process continues.

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Appendix 1: NSD Approval

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Vår dato: 10.10.2012 Vår ref: 31640 / 3 / AMS Deres dato: Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 27.09.2012. Meldingen gjelder prosjektet:

31640	*The Enchantment of Online Worlds*
Behandlingsansvarlig	*Universitetet i Oslo, ved institusjonens øverste leder*
Daglig ansvarlig	*Tanja Storsul*
Student	*Arild Valderhaug*

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, eventuelle kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 01.12.2012, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Bjørn Henrichsen

Anne-Mette Somby

Anne-Mette Somby tlf: 55 58 24 10
Vedlegg: Prosjektvurdering
Kopi: Arild Valderhaug, Valderhaugstrand, 6050 VALDERØYA

Personvernombudet for forskning

Prosjektvurdering - Kommentar

Prosjektnr: 31640

Ifølge prosjektmeldingen skal det gis skriftlig informasjon om prosjektet og behandling av personopplysninger. Personvernombudet finner informasjonsskrivet tilfredsstillende utformet i henhold til personopplysningslovens vilkår.

Innsamlede opplysninger registreres på privat pc. Personvernombudet legger til grunn at dette skjer i tråd med Universitetet i Oslo sine interne rutiner for datasikkerhet, spesielt med tanke på bruk av privat pc til oppbevaring av personidentifiserende data.

Prosjektet skal avsluttes 14.11.2012 og innsamlede opplysninger skal da anonymiseres.

Anonymisering innebærer at direkte personidentifiserende opplysninger som navn/e-postadresse slettes, og at indirekte personidentifiserende opplysninger (sammenstilling av bakgrunnsopplysninger som f.eks. yrke, alder, kjønn) fjernes eller grovkategoriseres slik at ingen enkeltpersoner kan gjenkjennes i materialet.

Appendix 2: Research Agreement

This survey is being conducted as part of a master's thesis at the University of Oslo. The topic of this thesis is the motivation of the user of "persistent online worlds" in purchasing digital in-game items using real-world money.

This survey will be distributed to several online forums to collect necessary data, as well as to recruit users to take part in a research interview either in-game or through chat software. The questions in this interview will focus on the individual user's habits, preferences and motivations in relation to such topics as online gaming, in-game behavior, play-style and buying of digital content.

Participation in this study is 100% voluntary, and any participant is free to withdraw at any time, without any further questions asked. If you choose to withdraw, any data collected will immediately be made anonymous, meaning it can no longer be traced to your e-mail address or any other nicknames, handles or usernames that might be used to identify you. All data collected will be treated confidentially, and no individual will be recognizable in the finished product. All data will be stored in text form on one single, non-public computer. All data will be made anonymous at the end of the project, which will be by December 1, 2012.

If you have any further questions, you can e-mail the student, Arild Valderhaug, at arildhva@student.media.uio.no.
You can also direct any questions to the project advisor, Tanja Storsul, at tanja.storsul@media.uio.no.

This project has been registered with the Agency for Personal Data Protection in Research, a part of the Norwegian Social Scientific Data Service. (Personvernombudet for forskning, Norsk Samfunnsvitenskapelig datatjeneste)

By completing and sending in the survey, as well as by adding your e-mail address in order to partake in an interview, you acknowledge having read and agreed to all terms of this document.

Appendix 3: Quantitative questionnaire

1. Age

[18 – 30] [31 – 45] [46 – 60] [61 or over]

2. Gender

[Male] [Female]

3. How many years have you been playing video games?

[Less than 1] [1 – 3] [5 – 10] [11 or more]

4. How many hours in a typical week do you spend playing video games?

[7 or less] [8 to 21] [22 or more]

5. What video game genres do you prefer to play?

[Shooter] [Roleplaying] [MMORPG] [Strategy] [Racing] [Fighting] [Other: Please specify]

6. Do you prefer single-player or multi-player games?

[Single-player] [Multi-player] [No preference]

7. Do you currently play any MMORPGs or other games set in a persistent online world? Examples of MMORPGs include World of Warcraft, Lord of the Rings Online or Star Wars: The Old Republic. Persistent online worlds are games where the game world is shared by all players, and the game world continues to exist independently of an individual user. Examples of this include Second Life and Habbo Hotel.

[Yes: Please specify] [No]

7a If yes: On a scale from 1 to 5, how important is it to you to have the best gear possible in the game in terms of stats (most damage, best buffs etc)? (1 = least important, 5 = most important)

[1] [2] [3] [4] [5]

7b If yes: On a scale from 1 to 5, how important is it to have equipment that is considered rare? (1 = least important, 5 = most important)

7c If yes: On a scale from 1 to 5, how important is it the appearance of your equipment to your game play experience? (1 = least important, 5 = most important)

7d. If yes: On a scale from 1 to 5, how important is it to you to be immersed in the game world while you are playing? (1 = least important, 5 = most important)
[1] [2] [3] [4] [5]

7e If yes: On a scale from 1 to 5, how important is overcoming challenges to your game play experience? (1 = least important, 5 = most important)

7f If yes: On a scale from 1 to 5, how important is it to interact with other people to your game play experience? (1 = least important, 5 = most important)

8. Have you ever spent real-world money to purchase in-game items such as weapons, armor, clothing, housing items or other items only available in-game? (Note that this does not include expansion packs, pre-order bonuses or other cases where the item(s) were part of a larger bundle.)
[Yes] [No]

9. Have you ever spent real-world money to receive an in-game boost to your in-game stats, abilities, experience gain or similar?
[Yes] [No]

If you would like to partake in an interview regarding the above topics, in addition to your experiences with online games in general, please include your e-mail address so we can contact you in order to arrange a time and date that would be suitable for you.

[Insert e-mail address]

Please note that this interview will be conducted in writing only, and can take place either in-game or through chat software such as MSN Messenger or Skype. The interview will take approximately 60 minutes. For more information about, please consult the Research Agreement (Link).

By clicking “Submit” you acknowledge having read and understood the Research Agreement found here. (Link)

Appendix 4: Interview Guide

Introduction

1. Information
   - Present self and project
   - Inform about confidentiality and usage of collected data
   - Ask if informant has any questions before starting
   - Get permission to save chat log

Easy questions, establishing informant's background

1. Questions bridging survey and interview
   - How long have you played this specific game?
   - What other games of this type have you played?
   - What made you decide to start playing this type of games?
   - What do you like about this type of games?

2. Clarify definitions
   - How would you define the term 'immersion'?
   - In the survey, you ranked immersion X in importance. Could you tell me about your reason for this?
   - In the survey, you ranked the quality of your gear X in importance. Could you elaborate on this as well, please?

More focused questions

1. In the survey, you indicated that you have purchased in game items using real life money.
   - What kind of items have you bought?
   - What made you decide to buy "item type A", "B" etc
   - Are there any types of items you prefer to buy over others?
   -Are there any types of item you would not be interested in buying? (If yes, why not?) (If yes, what, in your opinion, is the difference between "types of item bought" and "types of item you would not buy"

1b. In the survey, you indicated that you have not purchased in game items using real world money.

- Is there any particular reason why?
- Do you think there could be a circumstance in which you would be interested in purchasing in-game items?
-What, in your opinion, is the reason people choose to spend real world money on in-game items?

2. Microtransaction model as a whole

3. Follow-ups
- Relation between items and immersion?
- Stigma related to spending money on in-game items?

Summary

1. Summarize findings

2. Clarify statements that might have been misinterpreted

3. Ask if informant would like to add any information

4. Thank you and good bye